AUTHOR INDEX

Abramento, Mauricio

Shear-Lag Analysis of Planar Soil Reinforcement in Plane-Strain Compression, with Andrew J. Whittle, EM Feb. 93, p270-291

Abu-Lebdeh, Taher M.

Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, with George Z. Voyiadjis, EM July 93, p1465-1484 see Voyiadjis, George Z., EM Sept. 93, p1865-1885

Aglan, H. A.

Damage-Evolution Approach to Fatigue Cracking in Pavements, with J. L. Figueroa, EM June 93, p1243-1259

Ahmadi, Goodarz

see Chowdhury, Showkat J., EM Aug. 93, p1700-1706

Higher Order Modeling of Plates by p-Version of Finite Element Method, with Prodyot K. Basu, EM June 93, p1228-1242

Aldessandri, C.

disc. (of Frictionless Contact with BEM Using Quadratic Programming, by Srdan Simunović and Sunil Saigal, EM Sept. 92, p1876-1891) with A. Tralli, EM Dec. 93, p2538-2540

Alwis, W. A. M. see Wang, C. M., EM Oct. 92, p2135-2140

Andersen, Carl M.

see Noor, Ahmed K., EM Apr. 93, p786-800

Ansari, Farhad
Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, with Rajendra K. Navalurkar, EM May 93, p1048-1061

Arseculeratne, R.

see Kyriakides, S., EM Mar. 93, p570-583

Askar, Hasan G.

Stresses in Ground-Freezing Problems with Infi-nite Boundaries, EM Jan. 93, p58-73

Atanackovic, T. M. see Djukic, D. S., EM May 93, p1108-1115

Baker, G.

see Khennane, A., EM Aug. 93, p1507-1525

Baker, Graham

Lateral Buckling of Nonprismatic Cantilevers Using Weighted Residuals, EM Oct. 93, p1899-1919

Baruch, M.

see Frostig, Y., EM Mar. 93, p476-495

Basu, Prodyot K.

see Ahmed, Nesar U., EM June 93, p1228-1242

Bažant, Zdeněk P.

Scaling Laws in Mechanics of Failure, EM Sept.

disc. (of Use of Engineering Strain and Trefftz Theory in Buckling of Columns, by C. M. Wang and W. A. M. Alwis, EM Oct. 92, p2135-2140), EM Dec. 93, p2536-2537

see Carol, Ignacio, EM Nov. 93, p2252-2269

Beach, J. E. see Sarkani, S., EM Feb. 92, p296-311

Bear, Jacob

see Corapcioglu, M. Yavuz, EM Aug. 93, p1558-1578

Bedair, Osama K.

Plate-Stiffener Assemblies in Uniform Compression. Part I: Buckling, with Archibald N. Sherbourne, EM Oct. 93, p1937-1955

see Sherbourne, Archibald N., EM Oct. 93,

p1956-1972

Beliveau, Jean-Guy

see Zhang, Hai-Yan, EM Sept. 93, p1888-1897

Benaija, E. H.

see Torrenti, J. M., EM Dec. 93, p2369-2384

Bert, Charles W.

see Kukreti, Anant R., EM June 92, p1221-1238

Bhartia, Binod K.

Associate Linear System Approach to Nonlinear Random Vibration, with Erik H. Vanmarcke, EM Oct. 91, p2407-2428 disc: Ove Ditlevson and László Bognár, EM

Mar. 93, p638-640

Bognár, László

see Ditlevson, Ove, (disc), EM Oct. 91, p2407-

Boresi, Arthur P.

see Wang, Dong Q., EM July 92, p1357-1364

Bougacha, Samir

Analysis of Foundations on Fluid-Filled Poroe-

Analysis of routerloss of Plate-Tribe Police-lastic Stratum, with John L. Tassoulas and José M. Roësset, EM Aug. 93, p1632-1648 Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, with José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662

Boulay, C.

see Torrenti, J. M., EM Dec. 93, p2369-2384

Bradford, Mark Andrew

see Gao, Zhi, EM Oct. 93, p2036-2051

Brodland, G. Wayne

Large-Strain Analysis of Reinforced Membranes with Marcus J. Dell and Eric F. P. Burnett, EM Dec. 93, p2461-2477

Bruttomesso, Douglas A.

Development of Interferometer for Acoustic Emission Testing, with Laurence J. Jacobs and R. Daniel Costley, EM Nov. 93, p2303-2316

Budkowska, B. B.

Resting on Elastic Foundation, with C. Szymczak, EM June 92, p1239-1248 err. EM Jan. 93, p194-195

Burgoyne, C. J.

The Bicycle Wheel as Prestressed Structure, with R. Dilmaghanian, EM Mar. 93, p439-455

Burnett, Eric F. P. see Brodland, G. Wayne, EM Dec. 93, p2461-

Carol, Ignacio

Viscoelasticity with Aging Caused by Solidifica-tion of Nonaging Constituent, with Zdeněk P. Bažant, EM Nov. 93, p2252-2269

Cebon, D.

see Hardy, M. S. A., EM Sept. 93, p1762-1780

Chajes, M. J.

see Zhang, L., EM May 93, p1017-1024

Chang, G. Z.

see Huang, L. H., EM Aug. 93, p1600-1614

Chaudhuri, Reaz A. see Kabir, Humayun R. H., EM July 92, p1457-1467

Chen, Bang-Fuh

Dynamic Pressure of Water and Sediment on Rigid Dam, with Tin-Kan Hung, EM July 93, p1411-1433

Chen, C. -C.

Improved Time-History Analysis for Structural Dynamics. I: Treatment of Rapid Variation of Excitation and Material Nonlinearity, with A. R. Robinson, EM Dec. 93, p2496-2513 see Robinson, A. R., EM Dec. 93, p2514-2530

Chen, Charles C. T.

Flexible Thin Shell Elements Under Nonwhite and Nonzero Mean Loads, with Henry T. Y. Yang, EM Aug. 93, p1680-1697

Chen, Faliang

Analysis of Large Deflection Dynamic Response of Rigid-Plastic Beams, with Tongxi Yu, EM June 93, p1293-1301

Cheng, A. H-D.

see Zhang, L., EM May 93, p1017-1024

Cheng, S.

see Shi, Y. P., EM Mar. 93, p584-602

Chi, Shue-Yeong see Chiou, Yaw-Jeng, EM May 93, p938-954

Chiou, Yaw-Jeng

Limit Loads of Buried Pipelines in Inelastic Soil Medium, with Shue-Yeong Chi, EM May 93, p938-954

Chowdhury, Showkat J.

Analysis of Mixing Layer by Rate-Dependent Turbulence Model, with Goodarz Ahmadi, EM Aug. 93, p1700-1706

Chu. S. Y.

see Chung, L. L., EM Nov. 93, p2157-2173

Optimal Direct Output Feedback of Structural Control, with C. C. Lin and S. Y. Chu, EM Nov. 93, p2157-2173

Chwang, Allen T.

see Tahara, Yusuke, EM Apr. 93, p801-812 see Yu, Xiping, EM Sept. 93, p1804-1817

Connor, Jerome J.

see Gantes, Charis, EM Mar. 93, p456-475 see Kaneko, Yoshio, EM Apr. 93, p681-700 see Kaneko, Yoshio, EM Apr. 93, p701-719 Constantinou, M. C.

see Makris, Nicos, EM July 93, p1453-1464 see Makris, Nicos, EM Aug. 93, p1663-1679

Time-Dependent Response of Three-Filament Cord, with George A. Costello, EM Apr. 93, p833-849

Corapcioglu, M. Yavuz

Dynamic Compaction of Saturated Porous Col-umns, with Shashi Mathur and Jacob Bear, EM Aug. 93, p1558-1578

Cortinez, Victor H.

see Laura, Patricio A. A., (disc), EM June 92, p1221-1238

Costello, George A.

see Conway, Ted A., EM Apr. 93, p833-849

Costley, R. Daniel

Douglas A., EM Nov. 93, see Bruttomesso, p2303-2316

Dafalias, Yannis F.

Planar Double-Slip Micromechanical Model for Polycrystal Plasticity, EM June 93, p1260-1284

Dakoulas, Panos

Response of Earth Dams in Semicylindrical Can-yons to Oblique SH Waves, EM Jan. 93, p74-90

Dall'Asta, Andrea

Nonlinear Analysis of Beams Prestressed by Un-bonded Cables, with Luigino Dezi, EM Apr. 93, p720-732

Dargush, G. F.

see Makris, Nicos, EM Aug. 93, p1663-1679

Dell, Marcus J.

see Brodland, G. Wayne, EM Dec. 93, p2461-

Der Kiureghian, A.

see Li, Chun-Ching, EM June 93, p1136-1154

see Yu, P., EM Dec. 93, p2404-2425 see Yu, P., EM Dec. 93, p2426-2448

Dezi, Luigino

able Structural System, with Giovanni Menditto and Angelo Marcello Tarantino, EM Feb. 93, p238-250 Viscoelastic Heterogeneous Structures with Vari-

see Dall'Asta, Andrea, EM Apr. 93, p720-732

Dilmaghanian, R.

see Burgoyne, C. J., EM Mar. 93, p439-455

DiMaggio, Frank L.

see Messana, Salvatore J., EM July 93, p1434-

Dimentberg, M. F.

Toppling of Computer-Type Equipment under Base Excitation, with Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160

Ditlevson, Ove

disc. (of Associate Linear System Approach to Nonlinear Random Vibration, by Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428) with László Bognár, EM Mar. 93, p638-640

Djukic, D. S.

Effect of Shear on Simple Buckling Problem, with T. M. Atanackovic, EM May 93, p1108-1115

Domínguez, José

Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, with Orlando Maeso, EM Mar. 93, p513-530 see Maeso, Orlando, EM Mar. 93, p496-512

Drucker, Daniel C.
Triaxial Test Instability of a Nonassociated
Flow-Rule Model, with Ming Li, EM June 93, p1188-1204

Elling, R. E.

see Navaee, S., EM Mar. 93, p630-635

Elnashai, A. S.

see Izzuddin, B. A., EM Mar. 93, p549-569

see Sunder, S. Shyam, EM Oct. 93, p2011-2035

see Parsons, B. L., EM July 93, p1303-1313

Fabrikant, V. I.

Half-Plane Crack Under Normal Load: Complete Solution, with B. S. Rubin and E. N. Karapetian, EM Nov. 93, p2238-2251

Farhang, Kambiz

see Ghafoori, Nader, EM June 93, p1180-1187

Farsa, Jalaleddin

see Kukreti, Anant R., EM June 92, p1221-1238

Feng, Maria Qing
Application of Hybrid Sliding Isolation System to
Buildings, EM Oct. 93, p2090-2108

Friction-Controllable Sliding Isolation System, with Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864

Fenton, Gordon A

see Vanmarcke, Erik H., EM Nov. 93, p2333-

Figueroa, J. L.

see Aglan, H. A., EM June 93, p1243-1259

High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, EM May 93, p955-972

High-Order Buckling Analysis of Sandwich Beams with Transversely Flexible Core, with M. Baruch, EM Mar. 93, p476-495

Fu, Gongkans

Multimodal Simulation Method for System Reli-ability Analysis, with Fred Moses, EM June 93, p1173-1179

Fujii, Shunji

see Feng, Maria Qing, EM Sept. 93, p1845-1864

Ganduscio, Salvatore

see Romano, Filippo, EM June 93, p1117-1135

Gantes, Charis

Simple Friction Model for Scissor-Type Mobile Structures, with Jerome J. Connor and Robert D. Logcher, EM Mar. 93, p456-475

Gao, Zhi

Time-Dependent Shortening of Slender RC Col-umns, with Mark Andrew Bradford, EM Oct. 93, p2036-2051

Ghafoori, Nader

Parametrically Induced Vibration in Concrete Columns, with Kambiz Farhang, EM June 93, p1180-1187

Godoy, Luis A.

On Loads Equivalent to Geometrical Imperfec-tions in Shells, EM Jan. 93, p186-190

Goswami, Indranil

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, with Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287

Vortex-Induced Vibration of Circular Cylinders. II: New Model, with Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2288-2302

Grigoriu, Mircea

Simulation of Nonstationary Gaussian Processes by Random Trigonometric Polynomials, EM Feb. 93, p328-343

Guan, Fei

see Takemiya, Hirokazu, EM Dec. 93, p2385-2403

Gutierrez, E. Experimental Studies of Loading Rate Effects on Reinforced Concrete Columns, with G. Magonette and G. Verzeletti, EM May 93, p887-904

Hadian, M. Jafar

see Noor, Ahmed K., EM Apr. 93, p786-800

Hagen, Øistein

Outcrossing of Stationary Gaussian Process from 2D Elliptical Region, EM May 93, p973-996

Hakuno, Motohiko

Simulation of Concrete-Frame Collapse Due to Dynamic Loading, with Kimiro Meguro, EM Sept. 93, p1709-1723

Han, Kye

Sectional Capacity of Circular Steel Tubes under Combined Loading, with S. T. Mau and X. Zou, EM Feb. 93, p402-409

Hansen, Andrew C.

see Schmidt, Richard J., EM Apr. 93, p748-766

Hara, Takashi

see Ohga, Mitao, EM Nov. 91, p2509-2526

Response of Continuous Pavements to Moving Dynamic Loads, with D. Cebon, EM Sept. 93, p1762-1780

Hasebe, Norio
Second Mixed-Boundary-Value Problem for Thin-Plate Bending, with Masahiro Miwa and Takuji Nakamura, EM Feb. 93, p211-224

disc. (of Coupled Vertical and Horizontal Galloping, by Kathleen F. Jones, EM Jan. 92, p92-107) with O. F. Turan, EM Mar. 93, p640-641

Heredia-Zavoni, Ernesto

see Vanmarcke, Erik H., EM Nov. 93, p2333-2352

Heyliger, P. R.
Free Vibrations of Laminated Anisotropic Cylindrical Shells, with A. Jilani, EM May 93, p1062-1077

Hong, G. M.

Elastic Buckling of Circular Plates Allowing for Prebuckling Deformation, with C. M. Wang and W. Kanok-Nukulchai, EM May 93, p905-

Hoshiya, Masaru

Kalman Filter—Finite Element Method in Identification, with Atsushi Sutoh, EM Feb. 93, p197-210

Hsieh, P. C.

see Huang, L. H., EM Aug. 93, p1600-1614

Hu, Sau-Lon James

Non-Gaussian Properties of Second-Order Ran-dom Waves, with Dongsheng Zhao, EM Feb. 93, p344-364

Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, EM Sept. 93, p1818-1827

Huang, L. H.

Study on Porous Wave Makers, with P. C. Hsieh and G. Z. Chang, EM Aug. 93, p1600-1614

see Chen, Bang-Fuh, EM July 93, p1411-1433

Huston, Dryver R. see Zhang, Hai-Yan, EM Sept. 93, p1888-1897

Izzuddin, B. A.

Eulerian Formulation for Large-Displacement Analysis of Space Frames, with A. S. Elnashai, EM Mar. 93, p549-569

Jacobs, Laurence J.

see Bruttomesso, Douglas A., EM Nov. 93, p2303-2316

Ji, Feng

see Pak, Ronald Y. S., EM Apr. 93, p813-832

see Heyliger, P. R., EM May 93, p1062-1077

Jones, Kathleen F.

Coupled Vertical and Horizontal Galloping, EM Jan. 92, p92-107
disc: D. G. Havard and Ö. F. Turan, EM

Mar. 93, p640-641 clo: EM Mar. 93, p641

Jones, Nicholas P.

see Goswami, Indranil, EM Nov. 93, p2270-2287 see Goswami, Indranil, EM Nov. 93, p2288-2302 see Shenton, Harry W., III., EM Oct. 91, p2286-2306

see Shenton, Harry W., III., EM Oct. 91, p2307-2328

Kabir, Humayun R. H.

Boundary-Continuous Fourier Solution officially-Confined Structure Solution for Clamped Mindlin Plates, with Reaz A. Chau-dhuri, EM July 92, p1457-1467 disc: Robert Schmidt, EM Nov. 93, p2364 clo: EM Nov. 93, p2364-2367

Kaneko, Yoshio

Fracture Mechanics Approach for Failure of Concrete Shear Key. I: Theory, with Jerome J. Connor, Thanasis C. Triantafiliou and Christo-pher K. Leung, EM Apr. 93, p681-700

Fracture Mechanics Approach for Failure of Concrete Shear Key. II: Verification, with Je-rome J. Connor, Thanasis C. Triantafilloa and Christopher K. Leung, EM Apr. 93, p701-719

Kanok-Nukulchai, W.

see Hong, G. M., EM May 93, p905-916

Karapetian, E. N.

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, EM July 93, p1314-

see Fabrikant, V. I., EM Nov. 93, p2238-2251

see Li, Yousun, EM Jan. 93, p91-112

Kareem, Ahsan

Wind-Excited Surge Response of Tension-Leg Platform: Frequency-Domain Approach, with Yousun Li, EM Jan. 93, p161-183 see Li, Yousun, EM May 93, p1078-1098

Khennane, A.

Uniaxial Model for Concrete Under Variable Temperature and Stress, with G. Baker, EM Aug. 93, p1507-1525

Kihl, D. P.

see Sarkani, S., EM Feb. 92, p296-311

Kim, Jaekwan

piscrete Wave-Number Boundary-Element Method for 3-D Scattering Problems, with Apostolos S. Papageorgiou, EM Mar. 93, p603-624 Discrete

Kitipornchai, S.

see Wang, C. M., EM Feb. 93, p393-401 see Xiang, Y., EM Jan. 93, p1-18 see Xiang, Y., EM Aug. 93, p1579-1599

see Liaw, C. Y., EM Aug. 93, p1542-1557

König, Gert

Method to Solve Bond Differential-Equation System in Prestressed Concrete, with Nguyen Tue, EM Nov. 93, p2194-2206

Krenk, S.

Finite Step Updating Method for Elasto-Plastic Analysis of Frames, with S. Vissing and C. Vissing-Jørgensen, EM Dec. 93, p2478-2495

Krenk, Steen

see Zembaty, Zbigniew, EM Dec. 93, p2449-2460

Complete Stiffness Matrices for Buckling Analysis of Frames, EM Feb. 93, p225-237

Kukreti, Anant R.

Fundamental Frequency of Tapered Plates by Differential Quadrature, with Jalaleddin Farsa and Charles W. Bert, EM June 92, p1221-1238 disc: Patricio A. A. Laura and Victor H.
Cortinez, EM Dec. 93, p2532-2534
clo: EM Dec. 93, p2534

Kyriakides, S.

Propagating Instabilities in Long Shallow Panels, with R. Arseculeratne, EM Mar. 93, p570-583

Stability of Granular Materials in Postpeak Softening Regime, with Jerry A. Yamamuro, EM Jan. 93, p128-144

Larsson, Ragnar

see Runesson, Kenneth, EM Apr. 93, p647-666

Laura, Patricio A. A.

disc. (of Fundamental Frequency of Tapered Plates by Differential Quadrature, by Anant R. Kukreti, Jalaleddin Farsa and Charles W. Bert, EM June 92, p1221-1238) with Victor H. Cortinez, EM Dec. 93, p2532-2534

Lay, K. S.
Shell Finite Element Formulated on Shell Middle Surface, EM Oct. 93, p1973-1992

Lay, Khai Seong
Seismic Coupled Modeling of Axisymmetric
Tanks Containing Liquid, EM Sept. 93, p1747-1761

Lee, G. C. see Yang, Rihul, EM Aug. 93, p1615-1631

Leung, Christopher K. see Kaneko, Yoshio, EM Apr. 93, p681-700 see Kaneko, Yoshio, EM Apr. 93, p701-719

Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes, with R. E. Melchers, EM Nov. 93, p2354-2361

Li, Chun-Ching Optimal Discretization of Random Fields, with A. Der Kiureghian, EM June 93, p1136-1154

see Drucker, Daniel C., EM June 93, p1188-1204

Li, Q. C. see Lin, Y. K., EM Jan. 93, p113-127

Li, Yousun

Multivariate Hermite Expansion of Hydrodynamic Drag Loads on Tension Leg Platforms, with A. Kareem, EM Jan. 93, p91-112

Simulation of Multivariate Random Processes: Hybrid DFT and Digital Filtering Approach, with Ahsan Kareem, EM May 93, p1078-1098 see Kareem, Ahsan, EM Jan. 93, p161-183

Dynamic Stability and Chaos of System with Piecewise Linear Stiffness, with C. G. Koh, EM Aug. 93, p1542-1557

Liew, K. M. see Wang, C. M., EM Feb. 93, p393-401 see Xiang, Y., EM Jan. 93, p1-18 see Xiang, Y., EM Aug. 93, p1579-1599

see Chung, L. L., EM Nov. 93, p2157-2173

Lin, Y. K.

New Stochastic Theory for Bridge Stability in Turbulent Flow, with Q. C. Li, EM Jan. 93, p113-127 see Dimentberg, M. F., EM Jan. 93, p145-160

Lipscombe, P. R.

Free Rocking of Prismatic Blocks, with S. Pellegrino, EM July 93, p1387-1410

Liu, Kuo-Gin

see Liu, Pei-Ling, EM Apr. 93, p667-680

Liu, Pei-Ling Selection of Random Field Mesh in Finite Element Reliability Analysis, with Kuo-Gin Liu, EM Apr. 93, p667-680

Logcher, Robert D.

see Gantes, Charis, EM Mar. 93, p456-475

Low, K. H.

Comparative Study of Frequencies for Plates Carrying Mass, with C. K. Ng and Y. K. Ong, EM May 93, p917-937

Lu, F.

Strain Hardening Beams Under Shear, Bending and Axial Forces, with A. N. Sherbourne, EM Nov. 93, p2174-2193

Maeso, Orlando

Earthquake Analysis of Arch Dams, I: Dam-Foundation Interaction, with José Domínguez, EM Mar. 93, p496-512 see Domínguez, José, EM Mar. 93, p513-530

Magonette, G. see Gutierrez, E., EM May 93, p887-904

Maier, Giulio

Misc. (of Boundary Element-Transfer Matrix Method for Plated Structures, by Mitao Ohga, Tsunemi Shigematsu and Takashi Hara, EM Nov. 91, p2509-2526) with Georgio Novati, EM Feb. 93, p412-413

Makris, Nicos

Dynamic Analysis of Generalized Viscoelastic Fluids, with G. F. Dargush and M. C. Constan-tinou, EM Aug. 93, p1663-1679

Models of Viscoelasticity with Complex-Order Derivatives, with M. C. Constantinou, EM July 93, p1453-1464

Mathur, Shashi see Corapcioglu, M. Yavuz, EM Aug. 93, p1558-1578

Mau, S. T.

see Han, Kye, EM Feb. 93, p402-409

Meguro, Kimiro

see Hakuno, Motohiko, EM Sept. 93, p1709-1723

Melchers, R. E.

see Li, C. Q., EM Nov. 93, p2354-2361

Menditto, Giovanni

see Dezi, Luigino, EM Feb. 93, p238-250

Mendoza, Cesar see Zhou, Donghuo, EM Feb. 93, p365-383

Messana, Salvatore J.

Transient Scattering from Submerged Cylindrical Shell with Appendages, with Frank L. DiMaggio, EM July 93, p1434-1452

Mirmiran, Amir

Stability of Prebuckled Sandwich Elastica Arches: Parametric Study, with Amde M. Wolde-Tinsae, EM Apr. 93, p767-785

Miwa, Masahiro

see Hasebe, Norio, EM Feb. 93, p211-224

Morassi, Antonino

Crack-Induced Changes in Eigenparameters of Beam Structures, EM Sept. 93, p1798-1803

Morris, Nicholas F.

Effect of Member Snap on Space Truss Collapse, EM Apr. 93, p870-886

Moses, Fred

see Fu, Gongkang, EM June 93, p1173-1179

Muralidharan K.

see Natarajan, P. R., (disc), EM July 92, p1357-1364

Nagarajaiah, Satish

Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, with Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332

Nakamura, Takuji

see Hasebe, Norio, EM Feb. 93, p211-224

Nanthikesan, S. see Sunder, S. Shyam, EM Oct. 93, p2011-2035

Natarajan, P. R. disc. (of Theoretical Study of Stability Criteria for X-Bracing Systems, by Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364) with Muralidharan K., EM Dec. 93, p2535

Navaee, S.

Possible Ranges of End Slope for Cantilever Beams, with R. E. Elling, EM Mar. 93, p630-

Navalurkar, Rajendra K.

see Ansari, Farhad, EM May 93, p1048-1061

see Low, K. H., EM May 93, p917-937

Noor, Ahmed K.

Hybrid Analytical Technique for Nonlinear Vi-bration Analysis of Thin-Walled Beams, with M. Jafar Hadian and Carl M. Andersen, EM Apr. 93, p786-800

Norris, Gary M.

see Siddharthan, Raj, EM Oct. 93, p2052-2071 see Siddharthan, Raj, EM Oct. 93, p2072-2089

Novak, M.

see Ramadan, O., EM May 93, p997-1016

Novati, Georgio

see Maier, Giulio, (disc), EM Nov. 91, p2509-2526

Ohga, Mitao

Boundary Element-Transfer Matrix Method for Plated Structures, with Tsunemi Shigematsu and Takashi Hara, EM Nov. 91, p2509-2526 disc: Giulio Maier and Georgio Novati, EM Feb. 93, p412-413 clo: EM Feb. 93, p413-414

Ong, Y. K.

see Low, K. H., EM May 93, p917-937

Flexural-Torsional Stability of Thin-Walled Col-umns, with Seppo Salonen, EM Dec. 92, p2384-2400 err: EM Aug. 93, p1707

Pak, Ronald Y. S.

Rational Mechanics of Axial Soil-Pile Interaction, with Feng Ji, EM Apr. 93, p813-832

Palassopoulos, G. V.

New Approach to Buckling of Imperfection-Sensitive Structures, EM Apr. 93, p850-869

Papageorgiou, Apostolos S. see Kim, Jaekwan, EM Mar. 93, p603-624

Notch Sensitivity of First-Year Sea Ice, with F. M. Williams, J. Everard and T. Slade, EM July 93, p1303-1313

Peek, Ralf

see Yi, Waon-Ho, EM July 93, p1376-1386

Pellegrino, S.

see Lipscombe, P. R., EM July 93, p1387-1410

Piché, Robert

Lower Bounds for Critical Buckling Load Using Matrix Norms, EM May 93, p1100-1107

Pilkey, Walter D.

see Shah, Sudhir J., EM Oct. 93, p2109-2129

Popplewell, N.

see Yu, P., EM Dec. 93, p2404-2425 see Yu, P., EM Dec. 93, p2426-2448

Rajapakse, R. K. N. D.

Green's Functions for Transversely Isotropic Elastic Half Space, with Y. Wang, EM Sept. 93, p1724-1746

Stress Analysis of Borehole in Poroelastic Medi-um, EM June 93, p1205-1227

Raju, K. Kanaka

Thermal Postbuckling of Uniform Columns on Elastic Foundation, with G. Venkateswara Rao, EM Mar. 93, p626-629

Ramadan, O. Simulation of Spatially Incoherent Random Ground Motions, with M. Novak, EM May 93, p997-1016

Ramanjaneyulu, K.

see Rao, P. Srinivasa, EM Nov. 93, p2207-2225

Rao, G. Venkateswara

see Raju, K. Kanaka, EM Mar. 93, p626-629

Rao, P. Srinivasa

Stability of Cooling Tower Shell with Modified Wind Pressure Coefficients, with K. Ramanjaneyulu, EM Nov. 93, p2207-2225

Ray, Gautam

see Schoephoerster, Richard T., EM Apr. 93, p733-747

Reinhorn, Andrei

see Nagarajaiah, Satish, EM Nov. 93, p2317-2332

Ren, Xugui

see Wang, Keh-Han, EM May 93, p1025-1047

Rhodes, J.

see Seah, L. K., EM Jan. 93, p19-38

Riley, Michael A.

see Nagarajaiah, Satish, EM Nov. 93, p2317-2332

Robinson, A. R. Improved Time-History Analysis for Structural Dynamics II: Reduction of Effective Number of Degrees of Freedom, with C. -C. Chen, EM Dec. 93, p2514-2530 see Chen, C. -C., EM Dec. 93, p2496-2513

Roësset, José M.

see Bougacha, Samir, EM Aug. 93, p1632-1648 see Bougacha, Samir, EM Aug. 93, p1649-1662

Rofooei, Fayaz R.

Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, with Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010

Romano, Filippo

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, with Salvatore Ganduscio and Gaetano Zingone, EM June 93, p1117-

Rubin, B. S.

see Fabrikant, V. I., EM Nov. 93, p2238-2251

see Stankowski, T., EM Feb. 93, p292-314 see Stankowski, T., EM Feb. 93, p315-327

Runesson, Kenneth

Properties of Incremental Solutions for Dissipative Material, with Ragnar Larsson, EM Apr. 93, p647-666

Sagmeister, Bernhard

see Wörner, Johann-Dietrich, EM Feb. 93, p386-

Saigal, Sunil

see Simunović, Srdan, EM Sept. 92, p1876-1891

Salonen, Seppo

see Paavola, Juha, EM Dec. 92, p2384-2400

Fatigue of Welded Cruciforms Subjected to Nar-row-Band Loadings, with D. P. Kihl and J. E. Beach, EM Feb. 92, p296-311 err: EM Feb. 93, p417

Scanlan, Robert H.

Bridge Buffeting by Skew Winds in Erection Stag-

es, EM Feb. 93, p251-269

Problematics in Formulation of Wind-Force Models for Bridge Decks, EM July 93, p1353-

see Goswami, Indranil, EM Nov. 93, p2270-2287 see Goswami, Indranil, EM Nov. 93, p2288-2302

Schmidt, Richard J.

Plasticity Model for Transversely Isotropic Materials, with Dong-Qing Wang and Andrew C. Hansen, EM Apr. 93, p748-766

Schmidt, Robert

disc. (of Boundary-Continuous Fourier Solution for Clamped Mindlin Plates, by Humayun R. H. Kabir and Reaz A. Chaudhuri, EM July 92, p1457-1467), EM Nov. 93, p2364

Schoephoerster, Richard T.

Finite Analytic Model for Left Ventricular Systolic Flow Dynamics, with Cesar L. Silva and Gautam Ray, EM Apr. 93, p733-747

Sclavounos, P. D.

see Wang, P. F., EM June 93, p1155-1172

Seah, L. K.

Simplified Buckling Analysis of Plate with Compound Edge Stiffeners, with J. Rhodes, EM Jan. 93, p19-38

Şener, Sıddık

Effect of Rib Eccentricity on Infinitely Long Cy-lindrical Shells, EM July 93, p1493-1503

Flexural Buckling of Pretwisted Columns, EM June 93, p1286-1292

Shah, A. H.

see Yu, P., EM Dec. 93, p2404-2425 see Yu, P., EM Dec. 93, p2426-2448

Shah, Sudhir J.

Lumped-Parameter Approach to Stability Analysis, with Walter D. Pilkey, EM Oct. 93, p2109-

Shen, Hui-shen

Postbuckling Analysis of Stiffened Laminated Box Columns, with F. W. Williams, EM Jan. 93, p39-57

Shen, Xiaofeng

see Wörner, Johann-Dietrich, EM Feb. 93, p386-

Shenton, Harry W., III.
Base Excitation of Rigid Bodies. I: Formulation, with Nicholas P. Jones, EM Oct. 91, p2286-2306

disc: Anna Sinopoli, EM Oct. 93, p2138-2139

EM Oct. 93, p2140-2141 clo:

Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, with Nicholas P. Jones, EM Oct. 91, p2307-2328 disc: Anna Sinopoli, EM Jan. 93, p192 clo: EM Jan. 93, p193

Sherbourne, A. N.

see Lu, F., EM Nov. 93, p2174-2193

Sherbourne, Archibald N.

Plate-Stiffener Assemblies in Uniform Compression. Part II: Postbuckling, with Osama K. Bedair, EM Oct. 93, p1956-1972

see Bedair, Osama K., EM Oct. 93, p1937-1955

Analysis of Adhesive-Bonded Cylindrical Lap Joints Subjected to Axial Load, with S. Cheng, EM Mar. 93, p584-602

Shigematsu, Tsunemi

see Ohga, Mitao, EM Nov. 91, p2509-2526

Shinozuka, Masanobu

see Feng, Maria Oing, EM Sept. 93, p1845-1864

Siddharthan, Raj

Moving Load Response of Layered Soil. I: For-mulation, with Zia Zafir and Gary M. Norris, EM Oct. 93, p2052-2071

Moving Load Response of Layered Soil. II: Verification and Application, with Zia Zafir and Gary M. Norris, EM Oct. 93, p2072-2089

Minimum-Weight Design of Machine Founda-tion Under Vertical Load, with B. Wilczynski, EM Sept. 93, p1781-1797

Silva, Cesar L.

see Schoephoerster, Richard T., EM Apr. 93, p733-747

Simunović, Srđan

Frictionless Contact with BEM Using Quadratic Programming, with Sunil Saigal, EM Sept. 92,

disc: C. Aldessandri and A. Tralli, EM Dec. 93, p2538-2540 clo: EM Dec. 93, p2540

Sinopoli, Anna

disc. (of Base Excitation of Rigid Bodies. I: For-mulation, by Harry W. Shenton, III. and Nich-olas P. Jones, EM Oct. 91, p2286-2306), EM Oct. 93, p2138-2139

disc. (of Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, by Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328), EM Jan. 93, p192

Slade, T.

see Parsons, B. L., EM July 93, p1303-1313

Soh, Ai-Kah

Stresses in Plate Analysis, with Chee-Kiong Soh, EM Mar. 93, p427-438

Soh, Chee-Kiong

see Soh, Ai-Kah, EM Mar. 93, p427-438

Stankowski, T

Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, with K. Runesson and S. Sture, EM Feb. 93, p292-314

Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, with Runesson and S. Sture, EM Feb. 93, p315-327

Starossek, Uwe

Reduction of Dynamic Cable Stiffness to Linear Matrix Polynomial, EM Oct. 93, p2132-2136

Stathopoulos, Theodore

Computation of Wind Pressures on L-Shaped Buildings, with Yongsheng Zhou, EM Aug. 93, p1526-1541

see Wu, Hanging, EM Oct. 93, p1920-1936

Stumvoll, M.

Deformation Behavior of Ductile Solids Containing Anisotropic Damage, with G. Swoboda, EM July 93, p1331-1352

see Stankowski, T., EM Feb. 93, p292-314 see Stankowski, T., EM Feb. 93, p315-327

Sunder, S. Shyam

Numerical Modeling of Transient Creep in Polycrystalline Ice, with Alex Elvin and Nanthikesan, EM Oct. 93, p2011-2035

Sutoh, Atsushi see Hoshiya, Masaru, EM Feb. 93, p197-210

Swoboda, G.

see Stumvoll, M., EM July 93, p1331-1352

Szymczak, C.

see Budkowska, B. B., EM June 92, p1239-1248

Tadjbakhsh, Iradj G., see Rofooei, Fayaz R., EM Oct. 93, p1993-2010

Nonlinear Free-Surface Flow in Oscillating Chan-nel during Earthquakes, with Allen T. Chwang, EM Apr. 93, p801-812

Takemiya, Hirokazu

Transient Lamb's Solution for Surface Strip Impulses, with Fei Guan, EM Dec. 93, p2385-2403

Dynamic Response of Tank Containing Two Liquids, EM Mar. 93, p531-548

Tarantino, Angelo Marcello see Dezi, Luigino, EM Feb. 93, p238-250

Tassoulas, John L.

see Bougacha, Samir, EM Aug. 93, p1632-1648 see Bougacha, Samir, EM Aug. 93, p1649-1662

Torrenti, J. M.

Influence of Boundary Conditions on Strain Softening in Concrete Compression Test, with E. H. Benaija and C. Boulay, EM Dec. 93, p2369-2384

Tralli, A.

see Aldessandri, C., (disc), EM Sept. 92, p1876-1891

Triantafillou, Thanasis C.

see Kaneko, Yoshio, EM Apr. 93, p681-700 see Kaneko, Yoshio, EM Apr. 93, p701-719

see Yang, Rihul, EM Aug. 93, p1615-1631 Tue, Nguyen

see König, Gert, EM Nov. 93, p2194-2206

Turan, Ö. F.

see Havard, D. G., (disc), EM Jan. 92, p92-107

Valliappan, S.

see Zhao, Chongbin, EM July 93, p1486-1492

Vanmarcke, Erik H.

Conditional Simulation of Spatially Correlated Earthquake Ground Motion, with Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352 see Bhartia, Binod K., EM Oct. 91, p2407-2428

Verzeletti, G. see Gutierrez, E., EM May 93, p887-904

Vinogradov, Oleg

Dynamic Equations for System of Irregularly Shaped Plane Bodies, EM Nov. 93, p2226-2237

Vissing, S.

see Krenk, S., EM Dec. 93, p2478-2495

Vissing-Jørgensen, C. see Krenk, S., EM Dec. 93, p2478-2495

Voyiadjis, George Z.

Damage Model for Concrete Using Bounding Surface Concept, with Taher M. Abu-Lebdeh, EM Sept. 93, p1865-1885 see Abu-Lebdeh, Taher M., EM July 93, p1465-1484

Wang, C. M.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, with S. Kitipornchai, Y. ang and K. M. Liew, EM Feb. 93, p393-401

Use of Engineering Strain and Trefftz Theory in Buckling of Columns, with W. A. M. Alwis, EM Oct. 92, p2135-2140 Bažant, EM Dec. 93,

disc: Zdeněk P. Bažant, EM I p2536-2537 clo: EM Dec. 93, p2537-2538 see Hong, G. M., EM May 93, p905-916

see Xiang, Y., EM Jan. 93, p1-18

Wang, Dong Q. Theoretical Study of Stability Criteria for X-

Bracing Systems, with Arthur P. Boresi, EM July 92, p1357-1364 disc: P. R. Natarajan and Muralidharan K., EM Dec. 93, p2535 clo: EM Dec. 93, p2535-2536

Wang, Dong-Qing

see Schmidt, Richard J., EM Apr. 93, p748-766

Wang, Keh-Han

Water Waves on Flexible and Porous Breakwaters, with Xugui Ren, EM May 93, p1025-1047

Wang, P. F.

Second-Order Radiation Condition for Surface Wave-Body Interaction, with P. D. Sclavounos, EM June 93, p1155-1172

see Rajapakse, R. K. N. D., EM Sept. 93, p1724-

Whittle, Andrew J.

see Abramento, Mauricio, EM Feb. 93, p270-291

Wilczynski, B.

see Sienkiewicz, Z., EM Sept. 93, p1781-1797

Williams, F. M.

see Parsons, B. L., EM July 93, p1303-1313

Williams, F. W.

see Shen, Hui-shen, EM Jan. 93, p39-57

Wolde-Tinsae, Amde M.

see Mirmiran, Amir, EM Apr. 93, p767-785

Wörner, Johann-Dietrich

Observmentation of Load Sharing in Insulating Glass Units, with Xiaofeng Shen and Bernhard Sagmeister, EM Feb. 93, p386-392

Wind-Tunnel Techniques for Assessment of Pe-destrian-Level Winds, with Theodore Statho-poulos, EM Oct. 93, p1920-1936

Mindlin Plate Buckling with Prebuckling In-Plane Deformation, with C. M. Wang, K. M. Liew and S. Kitipornchai, EM Jan. 93, p1-18 Transverse Vibration of Thick Annular Sector Plates, with K. M. Liew and S. Kitipornchai, EM Aug. 93, p1579-1599

see Wang, C. M., EM Feb. 93, p393-401

Yamamuro, Jerry A. see Lade, Poul V., EM Jan. 93, p128-144

Yang, C. Y.

see Zhang, L., EM May 93, p1017-1024

Yang, Henry T. Y. see Chen, Charles C. T., EM Aug. 93, p1680-1697

Far-Field Modeling in 3D Dam-Reservoir Inter-action Analysis, with C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631

Posterior Time-Step Adjustment in Pseudody-namic Testing, with Ralf Peek, EM July 93, p1376-1386

Yu. P.

Three-Degree-of-Freedom Model for Galloping. Part II: Solutions, with Y. M. Desai, N. Popplewell and A. H. Shah, EM Dec. 93, p2426-2448

Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, with Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-2425

Yu, Tongxi

see Chen, Faliang, EM June 93, p1293-1301

Yu, Xiping

Analysis of Wave Scattering by Submerged Circular Disk, with Allen T. Chwang, EM Sept. 93, p1804-1817

Zafir, Zia see Siddharthan, Raj, EM Oct. 93, p2052-2071 see Siddharthan, Raj, EM Oct. 93, p2072-2089

Zembaty, Zbigniew
Spatial Seismic Excitations and Response Spectra, with Steen Krenk, EM Dec. 93, p2449-2460

Zhang, Hai-Yan

Minimum Lateral Stiffness for Equally Spaced Braces in Columns, with Jean-Guy Beliveau and Dryver R. Huston, EM Sept. 93, p1888-

Zhang, L.

Stability of Active-Tendon Structural Control with Time Delay, with C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024

Zhang, Ruichong see Dimentberg, M. F., EM Jan. 93, p145-160

Zhao, Chongbin Simplified Method for Dynamic Response of Tapered Structure, with S. Valliappan, EM July 93, p1486-1492

Zhao, Dongsheng see Hu, Sau-Lon James, EM Feb. 93, p344-364

Zhao, Zhiye

Direct Continuum irect Continuum Approach to Three-Dimensional Sensitivity Analysis, EM Nov. 93, n2143-2156

Zhou, Donghuo

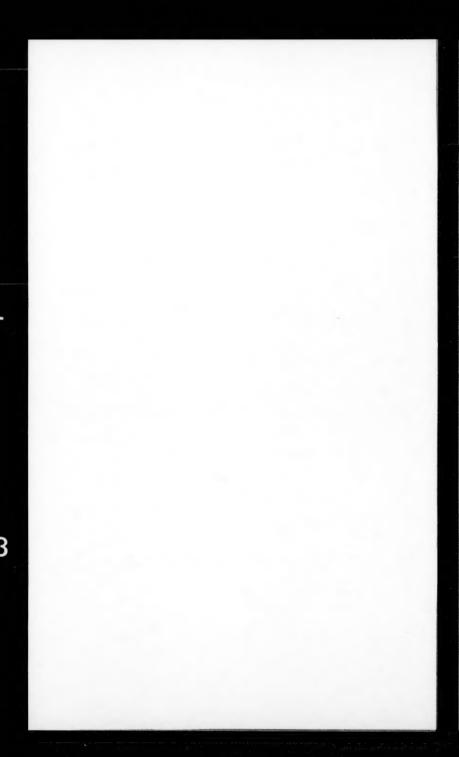
Flow through Porous Bed of Turbulent Stream, with Cesar Mendoza, EM Feb. 93, p365-383

Zhou, Yongsheng see Stathopoulos, p1526-1541

Theodore, EM Aug. 93,

Zingone, Gaetano see Romano, Filippo, EM June 93, p1117-1135

Zou, X. see Han, Kye, EM Feb. 93, p402-409



SUBJECT INDEX

Acceleration

Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, Fayaz R. Rofooei and Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010.

Acoustic measurement

Development of Interferometer for Acoustic Emission Testing, Douglas A. Bruttomesso, Laurence J. Jacobs and R. Daniel Costley, EM Nov. 93, p2303-2316.

Acoustic waves

Development of Interferometer for Acoustic Emission Testing, Douglas A. Bruttomesso, Laurence J. Jacobs and R. Daniel Costley, EM Nov. 93, p.2303-2316.

Acoustics

Transient Scattering from Submerged Cylindrical Shell with Appendages, Salvatore J. Messana and Frank L. DiMaggio, EM July 93, p1434-1452.

Active control

Optimal Direct Output Feedback of Structural Control, L. L. Chung, C. C. Lin and S. Y. Chu, EM Nov. 93, p2157-2173.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Adhesive bonding

Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-314

Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p315-327.

Aerodynamics

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Problematics in Formulation of Wind-Force Models for Bridge Decks, Robert H. Scanlan, EM July 93, p1353-1375.

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287.

Vortex-Induced Vibration of Circular Cylinders. II: New Model, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2288-2302.

Aeroelasticity

Problematics in Formulation of Wind-Force Models for Bridge Decks, Robert H. Scanlan, EM July 93, p1353-1375.

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287. Vortex-Induced Vibration of Circular Cylinders. II: New Model, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p.2288-2302.

Aging

Viscoelasticity with Aging Caused by Solidification of Nonaging Constituent, Ignacio Carol and Zdeněk P. Bažant, EM Nov. 93, p2252-2269.

Algorithms

Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.

Simulation of Nonstationary Gaussian Processes by Random Trigonometric Polynomials, Mircea Grigoriu, EM Feb. 93, p328-343.

Analysis

Boundary-Continuous Fourier Solution for Clamped Mindlin Plates, Humayun R. H. Kabir and Reaz A. Chaudhuri, EM July 92, p1457-1467.

Coupled Vertical and Horizontal Galloping, Kathleen F. Jones, EM Jan. 92, p92-107.

High-Order Buckling Analysis of Sandwich Beams with Transversely Flexible Core, Y. Frostig and M. Baruch, EM Mar. 93, p476-495.

Analytical techniques

Hybrid Analytical Technique for Nonlinear Vibration Analysis of Thin-Walled Beams, Ahmed K. Noor, M. Jafar Hadian and Carl M. Andersen, EM Apr. 93, p786-800.

Anisotropic materials

Deformation Behavior of Ductile Solids Containing Anisotropic Damage, M. Stumvoll and G. Swoboda, EM July 93, p1331-1352.

Plasticity Model for Transversely Isotropic Materials, Richard J. Schmidt, Dong-Qing Wang and Andrew C. Hansen, EM Apr. 93, p748-766.

Anisotropy

Green's Functions for Transversely Isotropic Elastic Half Space, R. K. N. D. Rajapakse and Y. Wang, EM Sept. 93, p1724-1746.

Approximation methods

Minimum Lateral Stiffness for Equally Spaced Braces in Columns, Hai-Yan Zhang, Jean-Guy Beliveau and Dryver R. Huston, EM Sept. 93, p1888-1897.

Arches

Propagating Instabilities in Long Shallow Panels, S. Kyriakides and R. Arseculeratne, EM Mar. 93, p570-583.

Stability of Prebuckled Sandwich Elastica Arches: Parametric Study, Amir Mirmiran and Amde M. Wolde-Tinsae, EM Apr. 93, p767-785.

Asphalt pavements

Damage-Evolution Approach to Fatigue Cracking in Pavements, H. A. Aglan and J. L. Figueroa, EM June 93, p1243-1259.

Analysis of Large Deflection Dynamic Response of Rigid-Plastic Beams, Faliang Chen and Tongxi Yu, EM June 93, p1293-1301.

Analysis of Adhesive-Bonded Cylindrical Lap Joints Subjected to Axial Load, Y. P. Shi and S. Cheng, EM Mar. 93, p584-602.

Plasticity Model for Transversely Isotropic Materials, Richard J. Schmidt, Dong-Qing Wang and Andrew C. Hansen, EM Apr. 93, p748-

Plate-Stiffener Assemblies in Uniform Compression. Part I: Buckling, Osama K. Bedair and Archibald N. Sherbourne, EM Oct. 93, p1937-

Simple Friction Model for Scissor-Type Mobile Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, EM Mar. 93, p456-

Base isolation

Application of Hybrid Sliding Isolation System to Buildings, N p2090-2108. Maria Qing Feng, EM Oct. 93,

Friction-Controllable Sliding Isolation System, Maria Qing Feng, Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864.

Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, Fayaz R. Rofooei and Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010.

Beam columns

New Approach to Buckling of Imperfection-Sensitive Structures, G. V. Palassopoulos, EM Apr. 93, p850-869.

Strain Hardening Beams Under Shear, Bending, and Axial Forces, F. Lu and A. N. Sherbourne, EM Nov. 93, p2174-2193.

Analysis of Large Deflection Dynamic Response of Rigid-Plastic Beams, Faliang Chen and Tongxi Yu, EM June 93, p1293-1301.

Complete Stiffness Matrices for Buckling Analysis of Frames, Petr Krysl, EM Feb. 93, p225-237.

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salva-tore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.

High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, Y. Frostig, EM May 93, p955-972.

Hybrid Analytical Technique for Nonlinear Vibration Analysis of Thin-Walled Beams, Ahmed K. Noor, M. Jafar Hadian and Carl M. Andersen, EM Apr. 93, p786-800.

Lateral Buckling of Nonprismatic Cantilevers Using Weighted Residuals, Graham Baker, EM Oct. 93, p1899-1919.

Nonlinear Analysis of Beams Prestressed by Unbonded Cables, Andrea Dall'Asta and Luigino Dezi, EM Apr. 93, p720-732.

Possible Ranges of End Slope for Cantilever Beams, S. Navaee and R. E. Elling, EM Mar. 93, p630-635.

Sensitivity Analysis of Thin-Walled I-Beams Resting on Elastic Foundation, B. B. Budkowska and C. Szymczak, EM June 92, p1239-1248.

Beams, structural

Crack-Induced Changes in Eigenparameters of Beam Structures, Antonino Morassi, EM Sept. 93, p1798-1803.

Bearing capacity

Strain Hardening Beams Under Shear, Bending, and Axial Forces, F. Lu and A. N. Sherbourne, EM Nov. 93, p2174-2193.

Bearings

Friction-Controllable Sliding Isolation System, Maria Qing Feng, Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864.

Bending

High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, Y. Frostig, EM May 93, p955-972.

econd Mixed-Boundary-Value Problem for Thin-Plate Bending, Norio Hasebe, Masahiro Miwa and Takuji Nakamura, EM Feb. 93, p211-224. Second

Time-Dependent Shortening of Slender RC Col-umns, Zhi Gao and Mark Andrew Bradford, EM Oct. 93, p2036-2051.

Bending moments

Strain Hardening Beams Under Shear, Bending, and Axial Forces, F. Lu and A. N. Sherbourne, EM Nov. 93, p2174-2193.

The Bicycle Wheel as Prestressed Structure, C. J. Burgoyne and R. Dilmaghanian, EM Mar. 93, p439-455.

Bifurcations

Dynamic Stability and Chaos of System with Piecewise Linear Stiffness, C. Y. Liaw and C. G. Koh, EM Aug. 93, p1542-1557.

High-Order Buckling Analysis of Sandwich Beams with Transversely Flexible Core, Y. Frostig and M. Baruch, EM Mar. 93, p476-495.

Stability of Prebuckled Sandwich Elastica Arches: Parametric Study, Amir Mirmiran and Amde M. Wolde-Tinsae, EM Apr. 93, p767-785.

Bonding

Method to Solve Bond Differential-Equation System in Prestressed Concrete, Gert König and Nguyen Tue, EM Nov. 93, p2194-2206.

Stress Analysis of Borehole in Poroelastic Medi-um, R. K. N. D. Rajapakse, EM June 93, p1205-1227.

Boundary conditions

- Flow through Porous Bed of Turbulent Stream, Donghuo Zhou and Cesar Mendoza, EM Feb. 93, p365-383.
- Influence of Boundary Conditions on Strain Softening in Concrete Compression Test, J. M. Torrenti, E. H. Benaija and C. Boulay, EM Dec. 93, p2369-2384.
- Plate-Stiffener Assemblies in Uniform Compression. Part I: Buckling, Osama K. Bedair and Archibald N. Sherbourne, EM Oct. 93, p1937-1955.
- Plate-Stiffener Assemblies in Uniform Compression. Part II: Postbuckling, Archibald N. Sherbourne and Osama K. Bedair, EM Oct. 93, p1956-1972.

Boundary element method

- Boundary Element-Transfer Matrix Method for Plated Structures, Mitao Ohga, Tsunemi Shigematsu and Takashi Hara, EM Nov. 91, p2509-2526.
- Direct Continuum Approach to Three-Dimensional Sensitivity Analysis, Zhiye Zhao, EM Nov. 93, p2143-2156.
- Dynamic Analysis of Generalized Viscoelastic Fluids, Nicos Makris, G. F. Dargush and M. C. Constantinou, EM Aug. 93, p1663-1679.
- Earthquake Analysis of Arch Dams. I: Dam-Foundation Interaction, Orlando Maeso and José Domínguez, EM Mar. 93, p496-512.
- Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, José Domínguez and Orlando Maeso, EM Mar. 93, p513-530.
- Frictionless Contact with BEM Using Quadratic Programming, Srdan Simunović and Sunil Saigal, EM Sept. 92, p1876-1891.
- Green's Functions for Transversely Isotropic Elastic Half Space, R. K. N. D. Rajapakse and Y. Wang, EM Sept. 93, p1724-1746.
- Nonlinear Free-Surface Flow in Oscillating Channel during Earthquakes, Yusuke Tahara and Allen T. Chwang, EM Apr. 93, p801-812.
- Seismic Coupled Modeling of Axisymmetric Tanks Containing Liquid, Khai Seong Lay, EM Sept. 93, p1747-1761.
- Study on Porous Wave Makers, L. H. Huang, P. C. Hsieh and G. Z. Chang, EM Aug. 93, p1600-1614.

Boundary processes

Far-Field Modeling in 3D Dam-Reservoir Interaction Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.

Boundary value problems

- Boundary-Continuous Fourier Solution for Clamped Mindlin Plates, Humayun R. H. Kabir and Reaz A. Chaudhuri, EM July 92, p1457-1467.
- Second Mixed-Boundary-Value Problem for Thin-Plate Bending, Norio Hasebe, Masahiro Miwa and Takuji Nakamura, EM Feb. 93, p211-224.

Bounding surface

- Damage Model for Concrete Using Bounding Surface Concept, George Z. Voyiadjis and Taher M. Abu-Lebdeh, EM Sept. 93, p1865-
- Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, Taher M. Abu-Lebdeh and George Z. Voyiadjis, EM July 93, p1465-1484.

Box columns

Postbuckling Analysis of Stiffened Laminated Box Columns, Hui-shen Shen and F. W. Williams, EM Jan. 93, p39-57.

Bracine

- Minimum Lateral Stiffness for Equally Spaced Braces in Columns, Hai-Yan Zhang, Jean-Guy Beliveau and Dryver R. Huston, EM Sept. 93, p1888-1897.
- Theoretical Study of Stability Criteria for X-Bracing Systems, Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364.

Breakwaters

Water Waves on Flexible and Porous Breakwaters, Keh-Han Wang and Xugui Ren, EM May 93, p1025-1047.

Bridge construction

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Bridge decks

- Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.
- Problematics in Formulation of Wind-Force Models for Bridge Decks, Robert H. Scanlan, EM July 93, p1353-1375.

Bridge

- Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.
- New Stochastic Theory for Bridge Stability in Turbulent Flow, Y. K. Lin and Q. C. Li, EM Jan. 93, p113-127.

Buckling

- Complete Stiffness Matrices for Buckling Analysis of Frames, Petr Krysl, EM Feb. 93, p225-237
- Effect of Member Snap on Space Truss Collapse, Nicholas F. Morris, EM Apr. 93, p870-886.
- Effect of Shear on Simple Buckling Problem, D. S. Djukic and T. M. Atanackovic, EM May 93, p1108-1115.
- Elastic Buckling of Circular Plates Allowing for Prebuckling Deformation, G. M. Hong, C. M. Wang and W. Kanok-Nukulchai, EM May 93, p905-916.
- Flexural Buckling of Pretwisted Columns, M. Serra, EM June 93, p1286-1292.
- High-Order Buckling Analysis of Sandwich Beams with Transversely Flexible Core, Y. Frostig and M. Baruch, EM Mar. 93, p476-495.
- Lateral Buckling of Nonprismatic Cantilevers Using Weighted Residuals, Graham Baker, EM Oct. 93, p1899-1919.

Lower Bounds for Critical Buckling Load Using Matrix Norms, Robert Piché, EM May 93, p1100-1107.

Mindlin Plate Buckling with Prebuckling In-Plane Deformation, Y. Xiang, C. M. Wang, K. M. Liew and S. Kitipornchai, EM Jan. 93, p1-18.

New Approach to Buckling of Imperfection-Sensitive Structures, G. V. Palassopoulos, EM Apr. 93, p850-869.

Plate-Stiffener Assemblies in Uniform Compression. Part I: Buckling, Osama K. Bedair and Archibald N. Sherbourne, EM Oct. 93, p1937-1955.

Propagating Instabilities in Long Shallow Panels, S. Kyriakides and R. Arseculeratne, EM Mar. 93, p570-583.

Sectional Capacity of Circular Steel Tubes under Combined Loading, Kye Han, S. T. Mau and X. Zou, EM Feb. 93, p402-409.

Simplified Buckling Analysis of Plate with Compound Edge Stiffeners, L. K. Seah and J. Rhodes, EM Jan. 93, p19-38.

Stability of Cooling Tower Shell with Modified Wind Pressure Coefficients, P. Srinivasa Rao and K. Ramanjaneyulu, EM Nov. 93, p2207-2225.

Stability of Prebuckled Sandwich Elastica Arches: Parametric Study, Amir Mirmiran and Amde M. Wolde-Tinsae, EM Apr. 93, p767-785.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Theoretical Study of Stability Criteria for X-Bracing Systems, Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364.

Thermal Postbuckling of Uniform Columns on Elastic Foundation, K. Kanaka Raju and G. Venkateswara Rao, EM Mar. 93, p626-629.

Use of Engineering Strain and Trefftz Theory in Buckling of Columns, C. M. Wang and W. A. M. Alwis, EM Oct. 92, p2135-2140.

Buffeting

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Ruilding

Computation of Wind Pressures on L-Shaped Buildings, Theodore Stathopoulos and Yongsheng Zhou, EM Aug. 93, p1526-1541.

Buried pipes

Limit Loads of Buried Pipelines in Inelastic Soil Medium, Yaw-Jeng Chiou and Shue-Yeong Chi, EM May 93, p938-954.

Cables

Nonlinear Analysis of Beams Prestressed by Unbonded Cables, Andrea Dall'Asta and Luigino Dezi, EM Apr. 93, p720-732.

Reduction of Dynamic Cable Stiffness to Linear Matrix Polynomial, Uwe Starossek, EM Oct. 93, p2132-2136.

Calibration

Models of Viscoelasticity with Complex-Order Derivatives, Nicos Makris and M. C. Constantinou, EM July 93, p1453-1464.

Cantilever

Possible Ranges of End Slope for Cantilever Beams, S. Navaee and R. E. Elling, EM Mar. 93, p630-635.

Cavities

Finite Analytic Model for Left Ventricular Systolic Flow Dynamics, Richard T. Schoephoerster, Cesar L. Silva and Gautam Ray, EM Apr. 93, p733-747.

Channel flow

Nonlinear Free-Surface Flow in Oscillating Channel during Earthquakes, Yusuke Tahara and Allen T. Chwang, EM Apr. 93, p801-812.

Channels, waterways

Nonlinear Free-Surface Flow in Oscillating Channel during Earthquakes, Yusuke Tahara and Allen T. Chwang, EM Apr. 93, p801-812.

Chaos

Dynamic Stability and Chaos of System with Piecewise Linear Stiffness, C. Y. Liaw and C. G. Koh, EM Aug. 93, p1542-1557.

Clamp

Boundary-Continuous Fourier Solution for Clamped Mindlin Plates, Humayun R. H. Kabir and Reaz A. Chaudhuri, EM July 92, p1457-1467.

Elastic Buckling of Circular Plates Allowing for Prebuckling Deformation, G. M. Hong, C. M. Wang and W. Kanok-Nukulchai, EM May 93, p905-916.

Closed form solutions

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, E. N. Karapetian, EM July 93, p1314-1330.

Half-Plane Crack Under Normal Load: Complete Solution, V. I. Fabrikant, B. S. Rubin and E. N. Karapetian, EM Nov. 93, p2238-2251.

Collapse

Simulation of Concrete-Frame Collapse Due to Dynamic Loading, Motohiko Hakuno and Kimiro Meguro, EM Sept. 93, p1709-1723.

Columns

Effect of Shear on Simple Buckling Problem, D. S. Djukic and T. M. Atanackovic, EM May 93, p1108-1115.

Flexural Buckling of Pretwisted Columns, M. Serra, EM June 93, p1286-1292.

Flexural-Torsional Stability of Thin-Walled Columns, Juha Paavola and Seppo Salonen, EM Dec. 92, p2384-2400.

Parametrically Induced Vibration in Concrete Columns, Nader Ghafoori and Kambiz Farhang, EM June 93, p1180-1187.

Thermal Postbuckling of Uniform Columns on Elastic Foundation, K. Kanaka Raju and G. Venkateswara Rao, EM Mar. 93, p626-629.

Time-Dependent Shortening of Slender RC Columns, Zhi Gao and Mark Andrew Bradford, EM Oct. 93, p2036-2051.

- Use of Engineering Strain and Trefftz Theory in Buckling of Columns, C. M. Wang and W. A. M. Alwis, EM Oct. 92, p2135-2140.
- Comparative studies
- Comparative Study of Frequencies for Plates Carrying Mass, K. H. Low, C. K. Ng and Y. K. Ong, EM May 93, p917-937.
- Composite materials
- Analysis of Adhesive-Bonded Cylindrical Lap Joints Subjected to Axial Load, Y. P. Shi and S. Cheng, EM Mar. 93, p584-602.
- Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-314.
- Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.
- Method to Solve Bond Differential-Equation System in Prestressed Concrete, Gert König and Nguyen Tue, EM Nov. 93, p2194-2206.
- Plasticity Model for Transversely Isotropic Materials, Richard J. Schmidt, Dong-Qing Wang and Andrew C. Hansen, EM Apr. 93, p748-766.

Compression

- Damage Model for Concrete Using Bounding Surface Concept, George Z. Voyiadjis and Taher M. Abu-Lebdeh, EM Sept. 93, p1865-1885.
- Dynamic Compaction of Saturated Porous Columns, M. Yavuz Corapcioglu, Shashi Mathur and Jacob Bear, EM Aug. 93, p1558-1578.
- Influence of Boundary Conditions on Strain Softening in Concrete Compression Test, J. M. Torrenti, E. H. Benaija and C. Boulay, EM Dec. 93, p2369-2384.
- Theoretical Study of Stability Criteria for X-Bracing Systems, Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364.

Computation

- Fundamental Frequency of Tapered Plates by Differential Quadrature, Anant R. Kukreti, Jalaleddin Farsa and Charles W. Bert, EM June 92, p1221-1238.
- Improved Time-History Analysis for Structural Dynamics. I: Treatment of Rapid Variation of Excitation and Material Nonlinearity, C. -C. Chen and A. R. Robinson, EM Dec. 93, p2496-2513.
- Improved Time-History Analysis for Structural Dynamics II: Reduction of Effective Number of Degrees of Freedom, A. R. Robinson and C. -C. Chen, EM Dec. 93, p2514-2530.

Computer applications

Friction-Controllable Sliding Isolation System, Maria Qing Feng, Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864.

Concrete

Damage Model for Concrete Using Bounding Surface Concept, George Z. Voyiadjis and Taher M. Abu-Lebdeh, EM Sept. 93, p1865-1885.

- Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-314.
- Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p315-327.
- Fracture Mechanics Approach for Failure of Concrete Shear Key. I: Theory, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p681-700.
- Fracture Mechanics Approach for Failure of Concrete Shear Key. II: Verification, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p701-719.
- Influence of Boundary Conditions on Strain Softening in Concrete Compression Test, J. M. Torrenti, E. H. Benaija and C. Boulay, EM Dec. 93, p2369-2384.
- Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, Farhad Ansari and Rajendra K. Navalurkar, EM May 93, p1048-1061.
- Parametrically Induced Vibration in Concrete Columns, Nader Ghafoori and Kambiz Farhang, EM June 93, p1180-1187.
- Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, Taher M. Abu-Lebdeh and George Z. Voyiadjis, EM July 93, p1465-1484.
- Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.
- Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.
- Viscoelasticity with Aging Caused by Solidification of Nonaging Constituent, Ignacio Carol and Zdeněk P. Bažant, EM Nov. 93, p2252-2269.

Concrete, prestressed

Method to Solve Bond Differential-Equation System in Prestressed Concrete, Gert König and Nguyen Tue, EM Nov. 93, p2194-2206.

Concrete, reinforced

- Experimental Studies of Loading Rate Effects on Reinforced Concrete Columns, E. Gutierrez, G. Magonette and G. Verzeletti, EM May 93, p887-904.
- Time-Dependent Shortening of Slender RC Columns, Zhi Gao and Mark Andrew Bradford, EM Oct. 93, p2036-2051.

Concrete structures

Simulation of Concrete-Frame Collapse Due to Dynamic Loading, Motohiko Hakuno and Kimiro Meguro, EM Sept. 93, p1709-1723.

Connections

Simple Friction Model for Scissor-Type Mobile Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, EM Mar. 93, p456-475

Constitutive equations

Effect of Shear on Simple Buckling Problem, D. S. Djukic and T. M. Atanackovic, EM May 93, p1108-1115.

Constitutive models

Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-314.

Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p315-327.

Fracture Mechanics Approach for Failure of Concrete Shear Key. I: Theory, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p681-700.

Fracture Mechanics Approach for Failure of Concrete Shear Key. II: Verification, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p701-719.

Numerical Modeling of Transient Creep in Polycrystalline Ice, S. Shyam Sunder, Alex Elvin and S. Nanthikesan, EM Oct. 93, p2011-2035.

Plasticity Model for Transversely Isotropic Materials, Richard J. Schmidt, Dong-Qing Wang and Andrew C. Hansen, EM Apr. 93, p748-766.

Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, Taher M. Abu-Lebdeh and George Z. Voyiadjis, EM July 93, p1465-1484.

Contact pressure

Frictionless Contact with BEM Using Quadratic Programming, Srdan Simunović and Sunil Saigal, EM Sept. 92, p1876-1891.

Rational Mechanics of Axial Soil-Pile Interaction, Ronald Y. S. Pak and Feng Ji, EM Apr. 93, p813-832.

Continuous structures

Response of Continuous Pavements to Moving Dynamic Loads, M. S. A. Hardy and D. Cebon, EM Sept. 93, p1762-1780.

Continuum mechanics

Damage Model for Concrete Using Bounding Surface Concept, George Z. Voyiadjis and Taher M. Abu-Lebdeh, EM Sept. 93, p1865-1885.

Direct Continuum Approach to Three-Dimensional Sensitivity Analysis, Zhiye Zhao, EM Nov. 93, p2143-2156.

Control

Posterior Time-Step Adjustment in Pseudodynamic Testing, Waon-Ho Yi and Ralf Peek, EM July 93, p1376-1386.

Control systems

Application of Hybrid Sliding Isolation System to Buildings, Maria Qing Feng, EM Oct. 93, p2090-2108.

Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.

Cooling towers

Stability of Cooling Tower Shell with Modified Wind Pressure Coefficients, P. Srinivasa Rao and K. Ramanjaneyulu, EM Nov. 93, p2207-2225.

Coordinates

Shell Finite Element Formulated on Shell Middle Surface, K. S. Lay, EM Oct. 93, p1973-1992.

Core

High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, Y. Frostig, EM May 93, p955-972.

High-Order Buckling Analysis of Sandwich Beams with Transversely Flexible Core, Y. Frostig and M. Baruch, EM Mar. 93, p476-495.

Crack initiation

Second Mixed-Boundary-Value Problem for Thin-Plate Bending, Norio Hasebe, Masahiro Miwa and Takuji Nakamura, EM Feb. 93, p211-224.

Crack propagation

Damage-Evolution Approach to Fatigue Cracking in Pavements, H. A. Aglan and J. L. Figueroa, EM June 93, p1243-1259.

Deformation Behavior of Ductile Solids Containing Anisotropic Damage, M. Stumvoll and G. Swoboda, EM July 93, p1331-1352.

Cracking

Crack-Induced Changes in Eigenparameters of Beam Structures, Antonino Morassi, EM Sept. 93, p1798-1803.

Cracks

Deformation Behavior of Ductile Solids Containing Anisotropic Damage, M. Stumvoll and G. Swoboda, EM July 93, p1331-1352.

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, E. N. Karapetian, EM July 93, p1314-1330.

Half-Plane Crack Under Normal Load: Complete Solution, V. I. Fabrikant, B. S. Rubin and E. N. Karapetian, EM Nov. 93, p2238-2251.

Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, Farhad Ansari and Rajendra K. Navalurkar, EM May 93, p1048-1061.

Method to Solve Bond Differential-Equation System in Prestressed Concrete, Gert König and Nguyen Tue, EM Nov. 93, p2194-2206.

Notch Sensitivity of First-Year Sea Ice, B. L. Parsons, F. M. Williams, J. Everard and T. Slade, EM July 93, p1303-1313.

C

Numerical Modeling of Transient Creep in Polycrystalline Ice, S. Shyam Sunder, Alex Elvin and S. Nanthikesan, EM Oct. 93, p2011-2035.

Time-Dependent Response of Three-Filament Cord, Ted A. Conway and George A. Costello, EM Apr. 93, p833-849.

Time-Dependent Shortening of Slender RC Columns, Zhi Gao and Mark Andrew Bradford, EM Oct. 93, p2036-2051. Viscoelastic Heterogeneous Structures with Variable Structural System, Luigino Dezi, Giovanni Menditto and Angelo Marcello Tarantino, EM Feb. 93, p238-250.

Viscoelasticity with Aging Caused by Solidification of Nonaging Constituent, Ignacio Carol and Zdeněk P. Bažant, EM Nov. 93, p2252-2269.

Critical load

Elastic Buckling of Circular Plates Allowing for Prebuckling Deformation, G. M. Hong, C. M. Wang and W. Kanok-Nukulchai, EM May 93, n905-916.

Lower Bounds for Critical Buckling Load Using Matrix Norms, Robert Piché, EM May 93, p1100-1107.

Theoretical Study of Stability Criteria for X-Bracing Systems, Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364.

Cross sections

Flexural Buckling of Pretwisted Columns, M. Serra, EM June 93, p1286-1292.

Currents

Wind-Excited Surge Response of Tension-Leg Platform: Frequency-Domain Approach, Ahsan Kareem and Yousun Li, EM Jan. 93, p161-183.

Curvature

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, E. N. Karapetian, EM July 93, p1314-1330.

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salvatore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.

Strain Hardening Beams Under Shear, Bending, and Axial Forces, F. Lu and A. N. Sherbourne, EM Nov. 93, p2174-2193.

Cyclic loads

Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, Taher M. Abu-Lebdeh and George Z. Voyiadjis, EM July 93, p1465-1484.

Cylinders

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287.

Vortex-Induced Vibration of Circular Cylinders. II: New Model, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2288-2302.

Cylindrical shells

Effect of Rib Eccentricity on Infinitely Long Cylindrical Shells, Siddik Şener, EM July 93, p1493-1503.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.

Transient Scattering from Submerged Cylindrical Shell with Appendages, Salvatore J. Messana and Frank L. DiMaggio, EM July 93, p1434-1452.

Dam foundations

Earthquake Analysis of Arch Dams. I: Dam-Foundation Interaction, Orlando Maeso and José Domínguez, EM Mar. 93, p496-512.

Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, José Domínguez and Orlando Maeso, EM Mar. 93, p513-530.

Damage

Damage Model for Concrete Using Bounding Surface Concept, George Z. Voyiadjis and Taher M. Abu-Lebdeh, EM Sept. 93, p1865-1885.

Damage-Evolution Approach to Fatigue Cracking in Pavements, H. A. Aglan and J. L. Figueroa, EM June 93, p1243-1259.

Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, Taher M. Abu-Lebdeh and George Z. Voyiadjis, EM July 93, p1465-1484.

Damage assessment

Crack-Induced Changes in Eigenparameters of Beam Structures, Antonino Morassi, EM Sept. 93, p1798-1803.

Damping

Models of Viscoelasticity with Complex-Order Derivatives, Nicos Makris and M. C. Constantinou, EM July 93, p1453-1464.

Dame

Dynamic Pressure of Water and Sediment on Rigid Dam, Bang-Fuh Chen and Tin-Kan Hung, EM July 93, p1411-1433.

Far-Field Modeling in 3D Dam-Reservoir Interaction Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.

Dams, arch

Earthquake Analysis of Arch Dams. I: Dam-Foundation Interaction, Orlando Maeso and José Domínguez, EM Mar. 93, p496-512.

Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, José Domínguez and Orlando Maeso, EM Mar. 93, p513-530.

Dams, earth

Response of Earth Dams in Semicylindrical Canyons to Oblique SH Waves, Panos Dakoulas, EM Jan. 93, p74-90.

Deflection

Analysis of Large Deflection Dynamic Response of Rigid-Plastic Beams, Faliang Chen and Tongxi Yu, EM June 93, p1293-1301.

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salvatore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.

Possible Ranges of End Slope for Cantilever Beams, S. Navaee and R. E. Elling, EM Mar. 93, p630-635.

Deformation

Deformation Behavior of Ductile Solids Containing Anisotropic Damage, M. Stumvoll and G. Swoboda, EM July 93, p1331-1352.

Elastic Buckling of Circular Plates Allowing for Prebuckling Deformation, G. M. Hong, C. M. Wang and W. Kanok-Nukulchai, EM May 93, p905-916.

Mindlin Plate Buckling with Prebuckling In-Plane Deformation, Y. Xiang, C. M. Wang, K. M. Liew and S. Kitipornchai, EM Jan. 93, pl-18.

Planar Double-Slip Micromechanical Model for Polycrystal Plasticity, Yannis F. Dafalias, EM June 93, p1260-1284.

Use of Engineering Strain and Trefftz Theory in Buckling of Columns, C. M. Wang and W. A. M. Alwis, EM Oct. 92, p2135-2140.

Degrees of freedom

Improved Time-History Analysis for Structural Dynamics II: Reduction of Effective Number of Degrees of Freedom, A. R. Robinson and C. -C. Chen, EM Dec. 93, p2514-2530.

Three-Degree-of-Freedom Model for Galloping. Part II: Solutions, P. Yu, Y. M. Desai, N. Popplewell and A. H. Shah, EM Dec. 93, p2426-2448.

Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, P. Yu, Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-2425

Design

Direct Continuum Approach to Three-Dimensional Sensitivity Analysis, Zhiye Zhao, EM Nov. 93, p2143-2156.

Diaphragms

High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, Y. Frostig, EM May 93, p955-972.

Differential equations

Method to Solve Bond Differential-Equation System in Prestressed Concrete, Gert König and Nguyen Tue, EM Nov. 93, p2194-2206.

Parametrically Induced Vibration in Concrete Columns, Nader Ghafoori and Kambiz Farhang, EM June 93, p1180-1187.

Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Diffraction

Second-Order Radiation Condition for Surface Wave-Body Interaction, P. F. Wang and P. D. Sclavounos, EM June 93, p1155-1172.

Dilatancy

Stability of Granular Materials in Postpeak Softening Regime, Poul V. Lade and Jerry A. Yamamuro, EM Jan. 93, p128-144.

Discrete elements

Dynamic Equations for System of Irregularly Shaped Plane Bodies, Oleg Vinogradov, EM Nov. 93, p2226-2237. Lumped-Parameter Approach to Stability Analysis, Sudhir J. Shah and Walter D. Pilkey, EM Oct. 93, p2109-2129.

Optimal Discretization of Random Fields, Chun-Ching Li and A. Der Kiureghian, EM June 93, p1136-1154.

Simulation of Concrete-Frame Collapse Due to Dynamic Loading, Motohiko Hakuno and Kimiro Meguro, EM Sept. 93, p1709-1723.

Displacement

Dynamic Compaction of Saturated Porous Columns, M. Yavuz Corapcioglu, Shashi Mathur and Jacob Bear, EM Aug. 93, p1558-1578.

Effect of Rib Eccentricity on Infinitely Long Cylindrical Shells, Siddik Şener, EM July 93, p1493-1503.

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, E. N. Karapetian, EM July 93, p1314-1330.

Eulerian Formulation for Large-Displacement Analysis of Space Frames, B. A. Izzuddin and A. S. Elnashai, EM Mar. 93, p549-569.

Half-Plane Crack Under Normal Load: Complete Solution, V. I. Fabrikant, B. S. Rubin and E. N. Karapetian, EM Nov. 93, p2238-2251.

Higher Order Modeling of Plates by p-Version of Finite Element Method, Nesar U. Ahmed and Prodyot K. Basu, EM June 93, p1228-1242.

On Loads Equivalent to Geometrical Imperfections in Shells, Luis A. Godoy, EM Jan. 93, p186-190.

Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, Fayaz R. Rofooei and Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010.

Stress Analysis of Borehole in Poroelastic Medium, R. K. N. D. Rajapakse, EM June 93, p1205-1227.

Displacements

Transient Lamb's Solution for Surface Strip Impulses, Hirokazu Takemiya and Fei Guan, EM Dec. 93, p2385-2403.

Dissipation

Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.

Properties of Incremental Solutions for Dissipative Material, Kenneth Runesson and Ragnar Larsson, EM Apr. 93, p647-666.

Drag

Multivariate Hermite Expansion of Hydrodynamic Drag Loads on Tension Leg Platforms, Yousun Li and A. Kareem, EM Jan. 93, p91-112.

Ductility

Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.

Deformation Behavior of Ductile Solids Containing Anisotropic Damage, M. Stumvoll and G. Swoboda, EM July 93, p1331-1352.

Dynamic analysis

Dynamic Analysis of Generalized Viscoelastic Fluids, Nicos Makris, G. F. Dargush and M. C. Constantinou, EM Aug. 93, p1663-1679.

Dynamic loads

- Moving Load Response of Layered Soil. I: Formulation, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2052-2071.
- Moving Load Response of Layered Soil. II: Verification and Application, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2072-2089.
- Response of Continuous Pavements to Moving Dynamic Loads, M. S. A. Hardy and D. Cebon, EM Sept. 93, p1762-1780.
- Simulation of Concrete-Frame Collapse Due to Dynamic Loading, Motohiko Hakuno and Kimiro Meguro, EM Sept. 93, p1709-1723.

Dynamic properties

Reduction of Dynamic Cable Stiffness to Linear Matrix Polynomial, Uwe Starossek, EM Oct. 93, p2132-2136.

Dynamic response

- Analysis of Large Deflection Dynamic Response of Rigid-Plastic Beams, Faliang Chen and Tongxi Yu, EM June 93, p1293-1301.
- Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.
- Base Excitation of Rigid Bodies. I: Formulation, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2286-2306.
- Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.
- Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.
- Effect of Member Snap on Space Truss Collapse, Nicholas F. Morris, EM Apr. 93, p870-886.
- Flexible Thin Shell Elements Under Nonwhite and Nonzero Mean Loads, Charles C. T. Chen and Henry T. Y. Yang, EM Aug. 93, p1680-1697.
- Models of Viscoelasticity with Complex-Order Derivatives, Nicos Makris and M. C. Constantinou, EM July 93, p1453-1464.
- Moving Load Response of Layered Soil. I: Formulation, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2052-2071.
- Moving Load Response of Layered Soil. II: Verification and Application, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2072-
- Response of Earth Dams in Semicylindrical Canyons to Oblique SH Waves, Panos Dakoulas, EM Jan. 93, p74-90.
- Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827.
- Simplified Method for Dynamic Response of Tapered Structure, Chongbin Zhao and S. Valliappan, EM July 93, p1486-1492.

Transient Scattering from Submerged Cylindrical Shell with Appendages, Salvatore J. Messana and Frank L. DiMaggio, EM July 93, p1434-1452.

Dynamic stability

Dynamic Stability and Chaos of System with Piecewise Linear Stiffness, C. Y. Liaw and C. G. Koh, EM Aug. 93, p1542-1557.

Dynamics

- Analysis of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, John L. Tassoulas and José M. Roësset, EM Aug. 93, p1632-1648.
- Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.
- Finite Analytic Model for Left Ventricular Systolic Flow Dynamics, Richard T. Schoephoerster, Cesar L. Silva and Gautam Ray, EM Apr. 93, p733-747.
- Minimum-Weight Design of Machine Foundation Under Vertical Load, Z. Sienkiewicz and B. Wilczynski, EM Sept. 93, p1781-1797.
- Posterior Time-Step Adjustment in Pseudodynamic Testing, Waon-Ho Yi and Ralf Peek, EM July 93, p1376-1386.
- Simulation of Spatially Incoherent Random Ground Motions, O. Ramadan and M. Novak, EM May 93, p997-1016.

Earthquake engineering

- Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.
- Base Excitation of Rigid Bodies. I: Formulation, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2286-2306.
- Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.
- Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.
- Earthquake Analysis of Arch Dams. 1: Dam-Foundation Interaction, Orlando Maeso and José Domínguez, EM Mar. 93, p496-512.
- Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, José Domínguez and Orlando Maeso, EM Mar. 93, p513-530.
- Posterior Time-Step Adjustment in Pseudodynamic Testing, Waon-Ho Yi and Ralf Peek, EM July 93, p1376-1386.

Earthquake excitation

- Optimal Direct Output Feedback of Structural Control, L. L. Chung, C. C. Lin and S. Y. Chu, EM Nov. 93, p2157-2173.
- Toppling of Computer-Type Equipment under Base Excitation, M. F. Dimentberg, Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160.

Earthquake resistant structures

Earthquake Analysis of Arch Dams. I: Dam-Foundation Interaction, Orlando Maeso and José Domínguez, EM Mar. 93, p496-512.

Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, José Domínguez and Orlando Maeso, EM Mar. 93, p513-530.

Earthquake simulation models

Simulation of Spatially Incoherent Random Ground Motions, O. Ramadan and M. Novak, EM May 93, p997-1016.

Earthquakes

Discrete Wave-Number Boundary-Element Method for 3-D Scattering Problems, Jaekwan Kim and Apostolos S. Papageorgiou, EM Mar. 93, p603-624.

Dynamic Pressure of Water and Sediment on Rigid Dam, Bang-Fuh Chen and Tin-Kan Hung, EM July 93, p1411-1433.

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

Free Rocking of Prismatic Blocks, P. R. Lipscombe and S. Pellegrino, EM July 93, p1387-1410.

Friction-Controllable Sliding Isolation System, Maria Qing Feng, Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864.

Nonlinear Free-Surface Flow in Oscillating Channel during Earthquakes, Yusuke Tahara and Allen T. Chwang, EM Apr. 93, p801-812.

Simplified Method for Dynamic Response of Tapered Structure, Chongbin Zhao and S. Valliappan, EM July 93, p1486-1492.

Eccentricity

Effect of Rib Eccentricity on Infinitely Long Cylindrical Shells, Siddik Şener, EM July 93, p1493-1503.

Edge effect

Simplified Buckling Analysis of Plate with Compound Edge Stiffeners, L. K. Seah and J. Rhodes, EM Jan. 93, p19-38.

Transverse Vibration of Thick Annular Sector Plates, Y. Xiang, K. M. Liew and S. Kitipornchai, EM Aug. 93, p1579-1599.

Effective length

Theoretical Study of Stability Criteria for X-Bracing Systems, Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364.

Eigenvalues

Optimal Discretization of Random Fields, Chun-Ching Li and A. Der Kiureghian, EM June 93, p1136-1154.

Elastic foundations

Sensitivity Analysis of Thin-Walled I-Beams Resting on Elastic Foundation, B. B. Budkowska and C. Szymczak, EM June 92, p1239-1248.

Thermal Postbuckling of Uniform Columns on Elastic Foundation, K. Kanaka Raju and G. Venkateswara Rao, EM Mar. 93, p626-629.

Elastic properties

Shear-Lag Analysis of Planar Soil Reinforcement in Plane-Strain Compression, Mauricio Abramento and Andrew J. Whittle, EM Feb. 93, p270-291.

Flastics

Possible Ranges of End Slope for Cantilever Beams, S. Navaee and R. E. Elling, EM Mar. 93, p630-635.

Elasticity

Analysis of Adhesive-Bonded Cylindrical Lap Joints Subjected to Axial Load, Y. P. Shi and S. Cheng, EM Mar. 93, p584-602.

Analysis of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, John L. Tassoulas and José M. Roësset, EM Aug. 93, p1632-1648.

Discrete Wave-Number Boundary-Element Method for 3-D Scattering Problems, Jaekwan Kim and Apostolos S. Papageorgiou, EM Mar. 93, p603-624.

Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.

Frictionless Contact with BEM Using Quadratic Programming, Srdan Simunović and Sunil Saigal, EM Sept. 92, p1876-1891.

Green's Functions for Transversely Isotropic Elastic Half Space, R. K. N. D. Rajapakse and Y. Wang, EM Sept. 93, p1724-1746.

Rational Mechanics of Axial Soil-Pile Interaction, Ronald Y. S. Pak and Feng Ji, EM Apr. 93, p813-832.

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Stress Analysis of Borehole in Poroelastic Medium, R. K. N. D. Rajapakse, EM June 93, p1205-1227.

Transverse Vibration of Thick Annular Sector Plates, Y. Xiang, K. M. Liew and S. Kitipornchai, EM Aug. 93, p1579-1599.

Triaxial Test Instability of a Nonassociated Flow-Rule Model, Daniel C. Drucker and Ming Li, EM June 93, p1188-1204.

Elastoplasticity

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salvatore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.

Finite Step Updating Method for Elasto-Plastic Analysis of Frames, S. Krenk, S. Vissing and C. Vissing-Jørgensen, EM Dec. 93, p2478-2495.

Energy

Properties of Incremental Solutions for Dissipative Material, Kenneth Runesson and Ragnar Larsson, EM Apr. 93, p647-666.

Energy dissipation

Damage-Evolution Approach to Fatigue Cracking in Pavements, H. A. Aglan and J. L. Figueroa, EM June 93, p1243-1259.

Energy methods

- Comparative Study of Frequencies for Plates Carrying Mass, K. H. Low, C. K. Ng and Y. K. Ong, EM May 93, p917-937.
- Mindlin Plate Buckling with Prebuckling In-Plane Deformation, Y. Xiang, C. M. Wang, K. M. Liew and S. Kitipornchai, EM Jan. 93, p1-18.

Equations of motion

Dynamic Equations for System of Irregularly Shaped Plane Bodies, Oleg Vinogradov, EM Nov. 93, p2226-2237.

Equilibrium state

Three-Degree-of-Freedom Model for Galloping. Part II: Solutions, P. Yu, Y. M. Desai, N. Popplewell and A. H. Shah, EM Dec. 93, p2426-2448.

Equipment

Toppling of Computer-Type Equipment under Base Excitation, M. F. Dimentberg, Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160.

Error analysis

Posterior Time-Step Adjustment in Pseudodynamic Testing, Waon-Ho Yi and Ralf Peek, EM July 93, p1376-1386.

Errors

Posterior Time-Step Adjustment in Pseudodynamic Testing, Waon-Ho Yi and Ralf Peek, EM July 93, p1376-1386.

Estimation

- Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.
- Optimal Discretization of Random Fields, Chun-Ching Li and A. Der Kiureghian, EM June 93, p1136-1154.

Excitation

- Flexible Thin Shell Elements Under Nonwhite and Nonzero Mean Loads, Charles C. T. Chen and Henry T. Y. Yang, EM Aug. 93, p1680-1697.
- Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827.
- Spatial Seismic Excitations and Response Spectra, Zbigniew Zembaty and Steen Krenk, EM Dec. 93, p2449-2460.

Experimental data

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287.

Failure modes

Toppling of Computer-Type Equipment under Base Excitation, M. F. Dimentberg, Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160.

Failures

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Far field

Far-Field Modeling in 3D Dam-Reservoir Interaction Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.

Fatigue

- Damage-Evolution Approach to Fatigue Cracking in Pavements, H. A. Aglan and J. L. Figueroa, EM June 93, p1243-1259.
- Fatigue of Welded Cruciforms Subjected to Narrow-Band Loadings, S. Sarkani, D. P. Kihl and J. E. Beach, EM Feb. 92, p296-311.

Feedback control

- Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, Fayaz R. Rofooei and Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010.
- Optimal Direct Output Feedback of Structural Control, L. L. Chung, C. C. Lin and S. Y. Chu, EM Nov. 93, p2157-2173.

Fiber optics

Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, Farhad Ansari and Rajendra K. Navalurkar, EM May 93, p1048-1061.

Fiber reinforced materials

- Fracture Mechanics Approach for Failure of Concrete Shear Key. I: Theory, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p681-700.
- Fracture Mechanics Approach for Failure of Concrete Shear Key. II: Verification, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p701-719.
- Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, Farhad Ansari and Rajendra K. Navalurkar, EM May 93, p1048-1061.

Filament wound materials

Time-Dependent Response of Three-Filament Cord, Ted A. Conway and George A. Costello, EM Apr. 93, p833-849.

Finite element analysis

Large-Strain Analysis of Reinforced Membranes, G. Wayne Brodland, Marcus J. Dell and Eric F. P. Burnett, EM Dec. 93, p2461-2477.

Finite element method

- Comparative Study of Frequencies for Plates Carrying Mass, K. H. Low, C. K. Ng and Y. K. Ong, EM May 93, p917-937.
- Determination of Inter- and Free-Boundary Stresses in Plate Analysis, Ai-Kah Soh and Chee-Kiong Soh, EM Mar. 93, p427-438.
- Flexible Thin Shell Elements Under Nonwhite and Nonzero Mean Loads, Charles C. T. Chen and Henry T. Y. Yang, EM Aug. 93, p1680-1697.
- Higher Order Modeling of Plates by p-Version of Finite Element Method, Nesar U. Ahmed and Prodyot K. Basu, EM June 93, p1228-1242.
- Kalman Filter—Finite Element Method in Identification, Masaru Hoshiya and Atsushi Sutoh, EM Feb. 93, p197-210.

Numerical Modeling of Transient Creep in Polycrystalline Ice, S. Shyam Sunder, Alex Elvin and S. Nanthikesan, EM Oct. 93, p2011-2035.

Stresses in Ground-Freezing Problems with Infinite Boundaries, Hasan G. Askar, EM Jan. 93, p58-73.

Finite elements

- Analysis of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, John L. Tassoulas and José M. Roësset, EM Aug. 93, p1632-1648.
- Complete Stiffness Matrices for Buckling Analysis of Frames, Petr Krysl, EM Feb. 93, p225-237.
- Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.
- Far-Field Modeling in 3D Dam-Reservoir Interaction Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.
- Finite Step Updating Method for Elasto-Plastic Analysis of Frames, S. Krenk, S. Vissing and C. Vissing-Jørgensen, EM Dec. 93, p2478-2495.
- Optimal Discretization of Random Fields, Chun-Ching Li and A. Der Kiureghian, EM June 93, p1136-1154.
- Seismic Coupled Modeling of Axisymmetric Tanks Containing Liquid, Khai Seong Lay, EM Sept. 93, p1747-1761.
- Selection of Random Field Mesh in Finite Element Reliability Analysis, Pei-Ling Liu and Kuo-Gin Liu, EM Apr. 93, p667-680.
- Shear-Lag Analysis of Planar Soil Reinforcement in Plane-Strain Compression, Mauricio Abramento and Andrew J. Whittle, EM Feb. 93, p270-291.
- Shell Finite Element Formulated on Shell Middle Surface, K. S. Lay, EM Oct. 93, p1973-1992.

Flexibility

- High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, Y. Frostig, EM May 93, p955-972.
- High-Order Buckling Analysis of Sandwich Beams with Transversely Flexible Core, Y. Frostig and M. Baruch, EM Mar. 93, p476-495.

Flexure

- Flexural Buckling of Pretwisted Columns, M. Serra, EM June 93, p1286-1292.
- Flexural-Torsional Stability of Thin-Walled Columns, Juha Paavola and Seppo Salonen, EM Dec. 92, p2384-2400.

Fluid flow

- Dynamic Analysis of Generalized Viscoelastic Fluids, Nicos Makris, G. F. Dargush and M. C. Constantinou, EM Aug. 93, p1663-1679.
- Finite Analytic Model for Left Ventricular Systolic Flow Dynamics, Richard T. Schoephoerster, Cesar L. Silva and Gautam Ray, EM Apr. 93, p733-747.
- Stress Analysis of Borehole in Poroelastic Medium, R. K. N. D. Rajapakse, EM June 93, p1205-1227.

Fluid-structure interaction

- Earthquake Analysis of Arch Dams. I: Dam-Foundation Interaction, Orlando Maeso and José Domínguez, EM Mar. 93, p496-512.
- Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, José Domínguez and Orlando Maeso, EM Mar. 93, p513-530.
- New Stochastic Theory for Bridge Stability in Turbulent Flow, Y. K. Lin and Q. C. Li, EM Jan. 93, p113-127.
- Seismic Coupled Modeling of Axisymmetric Tanks Containing Liquid, Khai Seong Lay, EM Sept. 93, p1747-1761.
- Water Waves on Flexible and Porous Breakwaters, Keh-Han Wang and Xugui Ren, EM May 93, p1025-1047.

Foundations

- Analysis of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, John L. Tassoulas and José M. Roësset, EM Aug. 93, p1632-1648.
- Base Excitation of Rigid Bodies. I: Formulation, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2286-2306.
- Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.
- Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.

Fourier series

- Boundary-Continuous Fourier Solution for Clamped Mindlin Plates, Humayun R. H. Kabir and Reaz A. Chaudhuri, EM July 92, p1457-1467.
- Effect of Rib Eccentricity on Infinitely Long Cylindrical Shells, Siddik Şener, EM July 93, p1493-1503.
- Flexural Buckling of Pretwisted Columns, M. Serra, EM June 93, p1286-1292.

Fourier transform

- Simulation of Multivariate Random Processes: Hybrid DFT and Digital Filtering Approach, Yousun Li and Ahsan Kareem, EM May 93, p1078-1098.
- Stress Analysis of Borehole in Poroelastic Medium, R. K. N. D. Rajapakse, EM June 93, p1205-1227.
- Transient Lamb's Solution for Surface Strip Impulses, Hirokazu Takemiya and Fei Guan, EM Dec. 93, p2385-2403.

Fracture mechanics

- Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-314
- Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p315-327.

- Fracture Mechanics Approach for Failure of Concrete Shear Key. I: Theory, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p681-700.
- Fracture Mechanics Approach for Failure of Concrete Shear Key. II: Verification, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p701-719.
- Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, Farhad Ansari and Rajendra K. Navalurkar, EM May 93, p1048-1061.
- Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Fractures

Second Mixed-Boundary-Value Problem for Thin-Plate Bending, Norio Hasebe, Masahiro Miwa and Takuji Nakamura, EM Feb. 93, p211-224.

Framed structures

- Complete Stiffness Matrices for Buckling Analysis of Frames, Petr Krysl, EM Feb. 93, p223-237.
- Eulerian Formulation for Large-Displacement Analysis of Space Frames, B. A. Izzuddin and A. S. Elnashai, EM Mar. 93, p549-569.
- Finite Step Updating Method for Elasto-Plastic Analysis of Frames, S. Krenk, S. Vissing and C. Vissing-Jørgensen, EM Dec. 93, p2478-2495.

Free surfaces

Nonlinear Free-Surface Flow in Oscillating Channel during Earthquakes, Yusuke Tahara and Allen T. Chwang, EM Apr. 93, p801-812.

Frequencies

- Comparative Study of Frequencies for Plates Carrying Mass, K. H. Low, C. K. Ng and Y. K. Ong, EM May 93, p917-937.
- Experimental Studies of Loading Rate Effects on Reinforced Concrete Columns, E. Gutierrez, G. Magonette and G. Verzeletti, EM May 93, p887-904.

Frequency

Fundamental Frequency of Tapered Plates by Differential Quadrature, Anant R. Kukreti, Jalaleddin Farsa and Charles W. Bert, EM June 92, p1221-1238.

Frequency analysis

Crack-Induced Changes in Eigenparameters of Beam Structures, Antonino Morassi, EM Sept. 93, p1798-1803.

Friction

- Application of Hybrid Sliding Isolation System to Buildings, Maria Qing Feng, EM Oct. 93, p2090-2108.
- Base Excitation of Rigid Bodies. I: Formulation, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2286-2306.
- Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.

- Friction-Controllable Sliding Isolation System, Maria Qing Feng, Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864.
- Simple Friction Model for Scissor-Type Mobile Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, EM Mar. 93, p456-475.

Frozen soils

Stresses in Ground-Freezing Problems with Infinite Boundaries, Hasan G. Askar, EM Jan. 93, p58-73.

Gaussian process

- Non-Gaussian Properties of Second-Order Random Waves, Sau-Lon James Hu and Dongsheng Zhao, EM Feb. 93, p344-364.
- Simulation of Nonstationary Gaussian Processes by Random Trigonometric Polynomials, Mircea Grigoriu, EM Feb. 93, p328-343.

Geotechnical engineering

Kalman Filter—Finite Element Method in Identification, Masaru Hoshiya and Atsushi Sutoh, EM Feb. 93, p197-210.

Glass plates

Determination of Load Sharing in Insulating Glass Units, Johann-Dietrich Wörner, Xiaofeng Shen and Bernhard Sagmeister, EM Feb. 93, p386-392.

Granular media

Stability of Granular Materials in Postpeak Softening Regime, Poul V. Lade and Jerry A. Yamamuro, EM Jan. 93, p128-144.

Greens function

Green's Functions for Transversely Isotropic Elastic Half Space, R. K. N. D. Rajapakse and Y. Wang, EM Sept. 93, p1724-1746.

Ground motion

- Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.
- Far-Field Modeling in 3D Dam-Reservoir Interaction Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.
- Response of Earth Dams in Semicylindrical Canyons to Oblique SH Waves, Panos Dakoulas, EM Jan. 93, p74-90.

Half space

Green's Functions for Transversely Isotropic Elastic Half Space, R. K. N. D. Rajapakse and Y. Wang, EM Sept. 93, p1724-1746.

High strength steel

Fatigue of Welded Cruciforms Subjected to Narrow-Band Loadings, S. Sarkani, D. P. Kihl and J. E. Beach, EM Feb. 92, p296-311.

Hydrodynamic pressure

Dynamic Pressure of Water and Sediment on Rigid Dam, Bang-Fuh Chen and Tin-Kan Hung, EM July 93, p1411-1433.

Hydrodynamics

Multivariate Hermite Expansion of Hydrodynamic Drag Loads on Tension Leg Platforms, Yousun Li and A. Kareem, EM Jan. 93, p91-112.

Wind-Excited Surge Response of Tension-Leg Platform: Frequency-Domain Approach, Ahsan Kareem and Yousun Li, EM Jan. 93, p161-183.

Ice

Notch Sensitivity of First-Year Sea Ice, B. L. Parsons, F. M. Williams, J. Everard and T. Slade, EM July 93, p1303-1313.

Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, P. Yu, Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-2425.

Ice cover

Coupled Vertical and Horizontal Galloping, Kathleen F. Jones, EM Jan. 92, p92-107.

Ice mechanics

Numerical Modeling of Transient Creep in Polycrystalline Ice, S. Shyam Sunder, Alex Elvin and S. Nanthikesan, EM Oct. 93, p2011-2035.

Identification

Kalman Filter—Finite Element Method in Identification, Masaru Hoshiya and Atsushi Sutoh, EM Feb. 93, p197-210.

Impact

Base Excitation of Rigid Bodies. I: Formulation, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2286-2306.

Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.

Free Rocking of Prismatic Blocks, P. R. Lipscombe and S. Pellegrino, EM July 93, p1387-1410.

Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, Farhad Ansari and Rajendra K. Navalurkar, EM May 93, p1048-1061.

Imperfections

New Approach to Buckling of Imperfection-Sensitive Structures, G. V. Palassopoulos, EM Apr. 93, p850-869.

On Loads Equivalent to Geometrical Imperfections in Shells, Luis A. Godoy, EM Jan. 93, p186-190.

Impingement

Free Rocking of Prismatic Blocks, P. R. Lipscombe and S. Pellegrino, EM July 93, p1387-1410.

Impulsive loads

Transient Lamb's Solution for Surface Strip Impulses, Hirokazu Takemiya and Fei Guan, EM Dec. 93, p2385-2403.

Inelastic action

Limit Loads of Buried Pipelines in Inelastic Soil Medium, Yaw-Jeng Chiou and Shue-Yeong Chi, EM May 93, p938-954.

Infinite elements

Stresses in Ground-Freezing Problems with Infinite Boundaries, Hasan G. Askar, EM Jan. 93, p58-73.

Insulation

Determination of Load Sharing in Insulating Glass Units, Johann-Dietrich Wörner, Xiaofeng Shen and Bernhard Sagmeister, EM Feb. 93, p386-392.

Integral equations

Rational Mechanics of Axial Soil-Pile Interaction, Ronald Y. S. Pak and Feng Ji, EM Apr. 93, p813-832.

Interactions

Far-Field Modeling in 3D Dam-Reservoir Interaction Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.

Interconnected systems

Dynamic Equations for System of Irregularly Shaped Plane Bodies, Oleg Vinogradov, EM Nov. 93, p2226-2237.

Interfaces

Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-314.

Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p315-327.

Interferometry

Development of Interferometer for Acoustic Emission Testing, Douglas A. Bruttomesso, Laurence J. Jacobs and R. Daniel Costley, EM Nov. 93, p2303-2316.

Internal pressure

Determination of Load Sharing in Insulating Glass Units, Johann-Dietrich Wörner, Xiaofeng Shen and Bernhard Sagmeister, EM Feb. 93, p386-392.

Isolators

Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.

Isotropic material

Half-Plane Crack Under Normal Load: Complete Solution, V. I. Fabrikant, B. S. Rubin and E. N. Karapetian, EM Nov. 93, p2238-2251.

Joints

Fracture Mechanics Approach for Failure of Concrete Shear Key. I: Theory, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p681-700.

Fracture Mechanics Approach for Failure of Concrete Shear Key. II: Verification, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Triantafillou and Christopher K. Leung, EM Apr. 93, p701-719.

Joints, bonded

Analysis of Adhesive-Bonded Cylindrical Lap Joints Subjected to Axial Load, Y. P. Shi and S. Cheng, EM Mar. 93, p584-602.

Kalman filter

Kalman Filter—Finite Element Method in Identification, Masaru Hoshiya and Atsushi Sutoh, EM Feb. 93, p197-210.

Lagrange's equations

Dynamic Equations for System of Irregularly Shaped Plane Bodies, Oleg Vinogradov, EM Nov. 93, p2226-2237.

Laminates

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.

Postbuckling Analysis of Stiffened Laminated Box Columns, Hui-shen Shen and F. W. Williams, EM Jan. 93, p39-57.

Laplace transform

Stress Analysis of Borehole in Poroelastic Medium, R. K. N. D. Rajapakse, EM June 93, p1205-1227.

Transient Lamb's Solution for Surface Strip Impulses, Hirokazu Takemiya and Fei Guan, EM Dec. 93, p2385-2403.

Lateral loads

Propagating Instabilities in Long Shallow Panels, S. Kyriakides and R. Arseculeratne, EM Mar. 93, p570-583.

Lateral stability

Lateral Buckling of Nonprismatic Cantilevers Using Weighted Residuals, Graham Baker, EM Oct. 93, p1899-1919.

Layered soils

Analysis of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, John L. Tassoulas and José M. Roësset, EM Aug. 93, n1632-1648.

Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.

Moving Load Response of Layered Soil. I: Formulation, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2052-2071.

Moving Load Response of Layered Soil. II: Verification and Application, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2072-2089.

Layered systems

Large-Strain Analysis of Reinforced Membranes, G. Wayne Brodland, Marcus J. Dell and Eric F. P. Burnett, EM Dec. 93, p2461-2477.

Least squares method

Determination of Inter- and Free-Boundary Stresses in Plate Analysis, Ai-Kah Soh and Chee-Kiong Soh, EM Mar. 93, p427-438.

Limit analysis

Limit Loads of Buried Pipelines in Inelastic Soil Medium, Yaw-Jeng Chiou and Shue-Yeong Chi, EM May 93, p938-954.

Linear analysis

Boundary Element-Transfer Matrix Method for Plated Structures, Mitao Ohga, Tsunemi Shigematsu and Takashi Hara, EM Nov. 91, p2509-2526.

Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.

Linear functions

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, E. N. Karapetian, EM July 93, p1314-1330.

Linear programming

Minimum-Weight Design of Machine Foundation Under Vertical Load, Z. Sienkiewicz and B. Wilczynski, EM Sept. 93, p1781-1797.

Liquids

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

Load combinations

Sectional Capacity of Circular Steel Tubes under Combined Loading, Kye Han, S. T. Mau and X. Zou, EM Feb. 93, p402-409.

Load distribution

Determination of Load Sharing in Insulating Glass Units, Johann-Dietrich Wörner, Xiaofeng Shen and Bernhard Sagmeister, EM Feb. 93, p386-392.

Load transfer

Rational Mechanics of Axial Soil-Pile Interaction, Ronald Y. S. Pak and Feng Ji, EM Apr. 93, p813-832.

Loading

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, E. N. Karapetian, EM July 93, p1314-1330.

Fatigue of Welded Cruciforms Subjected to Narrow-Band Loadings, S. Sarkani, D. P. Kihl and J. E. Beach, EM Feb. 92, p296-311.

Possible Ranges of End Slope for Cantilever Beams, S. Navaee and R. E. Elling, EM Mar. 93, p630-635.

Loading rate

Experimental Studies of Loading Rate Effects on Reinforced Concrete Columns, E. Gutierrez, G. Magonette and G. Verzeletti, EM May 93, p887-904.

Londs

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salvatore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.

Half-Plane Crack Under Normal Load: Complete Solution, V. I. Fabrikant, B. S. Rubin and E. N. Karapetian, EM Nov. 93, p2238-2251.

Limit Loads of Buried Pipelines in Inelastic Soil Medium, Yaw-Jeng Chiou and Shue-Yeong Chi, EM May 93, p938-954.

Machine foundations

Minimum-Weight Design of Machine Founda-tion Under Vertical Load, Z. Sienkiewicz and B. Wilczynski, EM Sept. 93, p1781-1797.

Mapping

Shell Finite Element Formulated on Shell Middle Surface, K. S. Lay, EM Oct. 93, p1973-1992.

Comparative Study of Frequencies for Plates Carrying Mass, K. H. Low, C. K. Ng and Y. K. Ong, EM May 93, p917-937.

Materials, properties

Experimental Studies of Loading Rate Effects on Reinforced Concrete Columns, E. Gutierrez, G. Magonette and G. Verzeletti, EM May 93, p887-904.

Mathematical models

Dynamic Compaction of Saturated Porous Col-umns, M. Yavuz Corapcioglu, Shashi Mathur and Jacob Bear, EM Aug. 93, p1558-1578.

Parametrically Induced Vibration in Concrete Columns, Nader Ghafoori and Kambiz Farhang, EM June 93, p1180-1187.

Mathematics

Discrete Wave-Number **Boundary-Element** Method for 3-D Scattering Problems, Jaekwan Kim and Apostolos S. Papageorgiou, EM Mar. 93, p603-624.

Matrices, mathematics

Boundary Element-Transfer Matrix Method for Plated Structures, Mitao Ohga, Tsunemi Shi-gematsu and Takashi Hara, EM Nov. 91,

Reduction of Dynamic Cable Stiffness to Linear Matrix Polynomial, Uwe Starossek, EM Oct. 93, p2132-2136.

Matrix methods

Boundary Element-Transfer Matrix Method for Plated Structures, Mitao Ohga, Tsunemi Shi-gematsu and Takashi Hara, EM Nov. 91, p2509-2526.

Shear-Lag Analysis of Planar Soil Reinforcement in Plane-Strain Compression, Mauricio Abramento and Andrew J. Whittle, EM Feb. 93, p270-291.

Membranes

Large-Strain Analysis of Reinforced Membranes, G. Wayne Brodland, Marcus J. Dell and Eric F. P. Burnett, EM Dec. 93, p2461-2477.

Selection of Random Field Mesh in Finite Element Reliability Analysis, Pei-Ling Liu and Kuo-Gin Liu, EM Apr. 93, p667-680.

Wind-Tunnel Techniques for Assessment of Pe-destrian-Level Winds, Hanqing Wu and Theo-dore Stathopoulos, EM Oct. 93, p1920-1936.

Analysis of Mixing Layer by Rate-Dependent Turbulence Model, Showkat J. Chowdhury and Goodarz Ahmadi, EM Aug. 93, p1700-1706.

Mobility

Simple Friction Model for Scissor-Type Mobile Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, EM Mar. 93, p456-

Model verification

Fracture Mechanics Approach for Failure of Concrete Shear Key. II: Verification, Yoshio Kaneko, Jerome J. Connor, Thanasis C. Trian-tafillou and Christopher K. Leung, EM Apr. 93, p701-719.

Modeling

Analysis of Mixing Layer by Rate-Dependent Turbulence Model, Showkat J. Chowdhury and Goodarz Ahmadi, EM Aug. 93, p1700-1706.

Far-Field Modeling in 3D Dam-Reservoir Inter-action Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.

Lumped-Parameter Approach to Stability Analysis, Sudhir J. Shah and Walter D. Pilkey, EM Oct. 93, p2109-2129.

Planar Double-Slip Micromechanical Model for Polycrystal Plasticity, Yannis F. Dafalias, EM June 93, p1260-1284.

Problematics in Formulation of Wind-Force Models for Bridge Decks, Robert H. Scanlan, EM July 93, p1353-1375.

Damage Model for Concrete Using Bounding Surface Concept, George Z. Voyiadjis and Taher M. Abu-Lebdeh, EM Sept. 93, p1865-

Models of Viscoelasticity with Complex-Order Derivatives, Nicos Makris and M. C. Constantinou, EM July 93, p1453-1464.

Properties of Incremental Solutions for Dissipative Material, Kenneth Runesson and Ragnar Larsson, EM Apr. 93, p647-666.

Three-Degree-of-Freedom Model for Galloping. Part II: Solutions, P. Yu, Y. M. Desai, N. Pop-plewell and A. H. Shah, EM Dec. 93, p2426-2448.

Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, P. Yu, Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-

Triaxial Test Instability of a Nonassociated Flow-Rule Model, Daniel C. Drucker and Ming Li, EM June 93, p1188-1204.

Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.

Vortex-Induced Vibration of Circular Cylinders. II: New Model, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2288-2302.

Mohr-Coulomb theory

Triaxial Test Instability of a Nonassociated Flow-Rule Model, Daniel C. Drucker and Ming Li, EM June 93, p1188-1204.

Moments

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salva-tore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.

Monte Carlo method

Multimodal Simulation Method for System Reliability Analysis, Gongkang Fu and Fred Moses, EM June 93, p1173-1179.

Motion

Coupled Vertical and Horizontal Galloping, Kathleen F. Jones, EM Jan. 92, p92-107.

Narrowband

Fatigue of Welded Cruciforms Subjected to Narrow-Band Loadings, S. Sarkani, D. P. Kihl and J. E. Beach, EM Feb. 92, p296-311.

Natural frequency

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.

Navier-Stokes equations

Flow through Porous Bed of Turbulent Stream, Donghuo Zhou and Cesar Mendoza, EM Feb. 93, p365-383.

Nondestructive tests

Development of Interferometer for Acoustic Emission Testing, Douglas A. Bruttomesso, Laurence J. Jacobs and R. Daniel Costley, EM Nov. 93, p2303-2316.

Nonlinear analysis

Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.

Eulerian Formulation for Large-Displacement Analysis of Space Frames, B. A. Izzuddin and A. S. Elnashai, EM Mar. 93, p549-569.

Moving Load Response of Layered Soil. 1: Formulation, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2052-2071.

Non-Gaussian Properties of Second-Order Random Waves, Sau-Lon James Hu and Dongsheng Zhao, EM Feb. 93, p344-364.

Nonlinear Analysis of Beams Prestressed by Unbonded Cables, Andrea Dall'Asta and Luigino Dezi, EM Apr. 93, p720-732.

Nonlinear response

Hybrid Analytical Technique for Nonlinear Vibration Analysis of Thin-Walled Beams, Ahmed K. Noor, M. Jafar Hadian and Carl M. Andersen, EM Apr. 93, p786-800.

Nonlinear systems

Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827.

Toppling of Computer-Type Equipment under Base Excitation, M. F. Dimentberg, Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160.

Notch sensitivity

Notch Sensitivity of First-Year Sea Ice, B. L. Parsons, F. M. Williams, J. Everard and T. Slade, EM July 93, p1303-1313.

Numerical analysis

Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p315-327. Method to Solve Bond Differential-Equation System in Prestressed Concrete, Gert König and Nguyen Tue, EM Nov. 93, p2194-2206.

Transverse Vibration of Thick Annular Sector Plates, Y. Xiang, K. M. Liew and S. Kitipornchai, EM Aug. 93, p1579-1599.

Viscoelasticity with Aging Caused by Solidification of Nonaging Constituent, Ignacio Carol and Zdeněk P. Bažant, EM Nov. 93, p2252-2269.

Numerical model

Computation of Wind Pressures on L-Shaped Buildings, Theodore Stathopoulos and Yongsheng Zhou, EM Aug. 93, p1526-1541.

Finite Analytic Model for Left Ventricular Systolic Flow Dynamics, Richard T. Schoephoerster, Cesar L. Silva and Gautam Ray, EM Apr. 93, p733-747.

Minimum-Weight Design of Machine Foundation Under Vertical Load, Z. Sienkiewicz and B. Wilczynski, EM Sept. 93, p1781-1797.

Numerical Modeling of Transient Creep in Polycrystalline Ice, S. Shyam Sunder, Alex Elvin and S. Nanthikesan, EM Oct. 93, p2011-2035.

Seismic Coupled Modeling of Axisymmetric Tanks Containing Liquid, Khai Seong Lay, EM Sept. 93, p1747-1761.

Simple Friction Model for Scissor-Type Mobile Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, EM Mar. 93, p456-475

Simulation of Multivariate Random Processes: Hybrid DFT and Digital Filtering Approach, Yousun Li and Ahsan Kareem, EM May 93, p1078-1098.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Offshore structures

Non-Gaussian Properties of Second-Order Random Waves, Sau-Lon James Hu and Dongsheng Zhao, EM Feb. 93, p344-364.

Sectional Capacity of Circular Steel Tubes under Combined Loading, Kye Han, S. T. Mau and X. Zou, EM Feb. 93, p402-409.

Open channel flow

Flow through Porous Bed of Turbulent Stream, Donghuo Zhou and Cesar Mendoza, EM Feb. 93, p365-383.

Open channels

Study on Porous Wave Makers, L. H. Huang, P. C. Hsieh and G. Z. Chang, EM Aug. 93, p1600-1614.

Optimal control methods

Application of Hybrid Sliding Isolation System to Buildings, Maria Qing Feng, EM Oct. 93, p2090-2108.

Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.

Friction-Controllable Sliding Isolation System, Maria Qing Feng, Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864.

3

Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, Fayaz R. Rofocei and Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010.

Optimal design

Minimum-Weight Design of Machine Foundation Under Vertical Load, Z. Sienkiewicz and B. Wilczynski, EM Sept. 93, p1781-1797.

Ontimization

- Optimal Direct Output Feedback of Structural Control, L. L. Chung, C. C. Lin and S. Y. Chu, EM Nov. 93, p2157-2173.
- Optimal Discretization of Random Fields, Chun-Ching Li and A. Der Kiureghian, EM June 93, p1136-1154.

Oscillations

- Study on Porous Wave Makers, L. H. Huang, P. C. Hsieh and G. Z. Chang, EM Aug. 93, p1600-1614.
- Three-Degree-of-Freedom Model for Galloping. Part II: Solutions, P. Yu, Y. M. Desai, N. Popplewell and A. H. Shah, EM Dec. 93, p2426-2448.
- Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, P. Yu, Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-2425.

Panels

Propagating Instabilities in Long Shallow Panels, S. Kyriakides and R. Arseculeratne, EM Mar. 93, p570-583.

Parameters

Kalman Filter—Finite Element Method in Identification, Masaru Hoshiya and Atsushi Sutoh, EM Feb. 93, p197-210.

Pavements

Response of Continuous Pavements to Moving Dynamic Loads, M. S. A. Hardy and D. Cebon, EM Sept. 93, p1762-1780.

Pedestrian safety

Wind-Tunnel Techniques for Assessment of Pedestrian-Level Winds, Hanqing Wu and Theodore Stathopoulos, EM Oct. 93, p1920-1936.

Pedestrians

Wind-Tunnel Techniques for Assessment of Pedestrian-Level Winds, Hanqing Wu and Theodore Stathopoulos, EM Oct. 93, p1920-1936.

Perturbation

- Postbuckling Analysis of Stiffened Laminated Box Columns, Hui-shen Shen and F. W. Williams, EM Jan. 93, p39-57.
- Three-Degree-of-Freedom Model for Galloping. Part II: Solutions, P. Yu, Y. M. Desai, N. Popplewell and A. H. Shah, EM Dec. 93, p2426-2448.
- Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, P. Yu, Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-2425.

Photogrammetry

Influence of Boundary Conditions on Strain Softening in Concrete Compression Test, J. M. Torrenti, E. H. Benaija and C. Boulay, EM Dec. 93, p2369-2384.

Pilos

Rational Mechanics of Axial Soil-Pile Interaction, Ronald Y. S. Pak and Feng Ji, EM Apr. 93, p813-832.

Plasticity

- Analysis of Large Deflection Dynamic Response of Rigid-Plastic Beams, Faliang Chen and Tongxi Yu, EM June 93, p1293-1301.
- Deformation Behavior of Ductile Solids Containing Anisotropic Damage, M. Stumvoll and G. Swoboda, EM July 93, p1331-1352.
- Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-314.
- Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p315-327.
- Planar Double-Slip Micromechanical Model for Polycrystal Plasticity, Yannis F. Dafalias, EM June 93, p1260-1284.
- Plasticity Model for Transversely Isotropic Materials, Richard J. Schmidt, Dong-Qing Wang and Andrew C. Hansen, EM Apr. 93, p748-766.
- Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, Taher M. Abu-Lebdeh and George Z. Voyiadjis, EM July 93, p1465-1484.
- Properties of Incremental Solutions for Dissipative Material, Kenneth Runesson and Ragnar Larsson, EM Apr. 93, p647-666.
- Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.
- Triaxial Test Instability of a Nonassociated Flow-Rule Model, Daniel C. Drucker and Ming Li, EM June 93, p1188-1204.
- Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.

Plate

- Boundary Element-Transfer Matrix Method for Plated Structures, Mitao Ohga, Tsunemi Shigematsu and Takashi Hara, EM Nov. 91, p2509-2526.
- Boundary-Continuous Fourier Solution for Clamped Mindlin Plates, Humayun R. H. Kabir and Reaz A. Chaudhuri, EM July 92, p1457-1467.
- Comparative Study of Frequencies for Plates Carrying Mass, K. H. Low, C. K. Ng and Y. K. Ong, EM May 93, p917-937.
- Determination of Inter- and Free-Boundary Stresses in Plate Analysis, Ai-Kah Soh and Chee-Kiong Soh, EM Mar. 93, p427-438.
- Elastic Buckling of Circular Plates Allowing for Prebuckling Deformation, G. M. Hong, C. M. Wang and W. Kanok-Nukulchai, EM May 93, p905-916.

- Fundamental Frequency of Tapered Plates by Differential Quadrature, Anant R. Kukreti, Jalaleddin Farsa and Charles W. Bert, EM June 92, p1221-1238.
- Higher Order Modeling of Plates by p-Version of Finite Element Method, Nesar U. Ahmed and Prodyot K. Basu, EM June 93, p1228-1242.
- Mindlin Plate Buckling with Prebuckling In-Plane Deformation, Y. Xiang, C. M. Wang, K. M. Liew and S. Kitipornchai, EM Jan. 93, pl-18.
- Plate-Stiffener Assemblies in Uniform Compression. Part I: Buckling, Osama K. Bedair and Archibald N. Sherbourne, EM Oct. 93, p1937-1955.
- Plate-Stiffener Assemblies in Uniform Compression. Part II: Postbuckling, Archibald N. Sherbourne and Osama K. Bedair, EM Oct. 93, p1936-1972.
- Second Mixed-Boundary-Value Problem for Thin-Plate Bending, Norio Hasebe, Masahiro Miwa and Takuji Nakamura, EM Feb. 93, p211-224.
- Simplified Buckling Analysis of Plate with Compound Edge Stiffeners, L. K. Seah and J. Rhodes, EM Jan. 93, p19-38.
- Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.
- Transverse Vibration of Thick Annular Sector Plates, Y. Xiang, K. M. Liew and S. Kitipornchai, EM Aug. 93, p1579-1599.

Polycrystalline

Planar Double-Slip Micromechanical Model for Polycrystal Plasticity, Yannis F. Dafalias, EM June 93, p1260-1284.

Polynomials

- Multivariate Hermite Expansion of Hydrodynamic Drag Loads on Tension Leg Platforms, Yousun Li and A. Kareem, EM Jan. 93, p91-112.
- Reduction of Dynamic Cable Stiffness to Linear Matrix Polynomial, Uwe Starossek, EM Oct. 93, p2132-2136.
- Simulation of Nonstationary Gaussian Processes by Random Trigonometric Polynomials, Mircea Grigoriu, EM Feb. 93, p328-343.

Pore pressure

- Dynamic Compaction of Saturated Porous Columns, M. Yavuz Corapcioglu, Shashi Mathur and Jacob Bear, EM Aug. 93, p1558-1578.
- Stress Analysis of Borehole in Poroelastic Medium, R. K. N. D. Rajapakse, EM June 93, p1205-1227.

Porosity

- Analysis of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, John L. Tassoulas and José M. Roësset, EM Aug. 93, p1632-1648.
- Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.

Porous materials

- Flow through Porous Bed of Turbulent Stream, Donghuo Zhou and Cesar Mendoza, EM Feb. 93, p365-383.
- Study on Porous Wave Makers, L. H. Huang, P. C. Hsieh and G. Z. Chang, EM Aug. 93, p1600-1614.
- Water Waves on Flexible and Porous Breakwaters, Keh-Han Wang and Xugui Ren, EM May 93, p1025-1047.

Porous media

- Dynamic Compaction of Saturated Porous Columns, M. Yavuz Corapcioglu, Shashi Mathur and Jacob Bear, EM Aug. 93, p1558-1578.
- Dynamic Pressure of Water and Sediment on Rigid Dam, Bang-Fuh Chen and Tin-Kan Hung, EM July 93, p1411-1433.
- Moving Load Response of Layered Soil. I: Formulation, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2052-2071.
- Moving Load Response of Layered Soil. II: Verification and Application, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2072-2089.

Postbuckling behavior

- Plate-Stiffener Assemblies in Uniform Compression. Part II: Postbuckling, Archibald N. Sherbourne and Osama K. Bedair, EM Oct. 93, p1956-1972.
- Postbuckling Analysis of Stiffened Laminated Box Columns, Hui-shen Shen and F. W. Williams, EM Jan. 93, p39-57.
- Thermal Postbuckling of Uniform Columns on Elastic Foundation, K. Kanaka Raju and G. Venkateswara Rao, EM Mar. 93, p626-629.

Potential flow

Analysis of Wave Scattering by Submerged Circular Disk, Xiping Yu and Allen T. Chwang, EM Sept. 93, p1804-1817.

Potential theory

Properties of Incremental Solutions for Dissipative Material, Kenneth Runesson and Ragnar Larsson, EM Apr. 93, p647-666.

Prestressin

- The Bicycle Wheel as Prestressed Structure, C. J. Burgoyne and R. Dilmaghanian, EM Mar. 93, p439-455.
- Nonlinear Analysis of Beams Prestressed by Unbonded Cables, Andrea Dall'Asta and Luigino Dezi, EM Apr. 93, p720-732.
- Stability of Prebuckled Sandwich Elastica Arches: Parametric Study, Amir Mirmiran and Amde M. Wolde-Tinsae, EM Apr. 93, p767-785

Probabilistic methods

Outcrossing of Stationary Gaussian Process from 2D Elliptical Region, Øistein Hagen, EM May 93, p973-996.

Probability

Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.

- Outcrossing of Stationary Gaussian Process from 2D Elliptical Region, Øistein Hagen, EM May 93, p973-996.
- Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes, C. Q. Li and R. E. Melchers, EM Nov. 93, p2354-2361.
- Toppling of Computer-Type Equipment under Base Excitation, M. F. Dimentberg, Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160.

Pseudodynamic method

Posterior Time-Step Adjustment in Pseudodynamic Testing, Waon-Ho Yi and Ralf Peek, EM July 93, p1376-1386.

Pulse generators

Second-Order Radiation Condition for Surface Wave-Body Interaction, P. F. Wang and P. D. Sclavounos, EM June 93, p1155-1172.

Quadratic programming

Frictionless Contact with BEM Using Quadratic Programming, Srdan Simunović and Sunil Saigal, EM Sept. 92, p1876-1891.

D-41-41--

Second-Order Radiation Condition for Surface Wave-Body Interaction, P. F. Wang and P. D. Sclavounos, EM June 93, p1155-1172.

Random processes

- Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.
- Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.
- Simulation of Multivariate Random Processes: Hybrid DFT and Digital Filtering Approach, Yousun Li and Ahsan Kareem, EM May 93, p1078-1098.
- Simulation of Spatially Incoherent Random Ground Motions, O. Ramadan and M. Novak, EM May 93, p997-1016.

Random variable

- Optimal Discretization of Random Fields, Chun-Ching Li and A. Der Kiureghian, EM June 93, p1136-1154.
- Selection of Random Field Mesh in Finite Element Reliability Analysis, Pei-Ling Liu and Kuo-Gin Liu, EM Apr. 93, p667-680.

Random vibration

- Flexible Thin Shell Elements Under Nonwhite and Nonzero Mean Loads, Charles C. T. Chen and Henry T. Y. Yang, EM Aug. 93, p1680-1697.
- Multivariate Hermite Expansion of Hydrodynamic Drag Loads on Tension Leg Platforms, Yousun Li and A. Kareem, EM Jan. 93, p91-112.
- New Stochastic Theory for Bridge Stability in Turbulent Flow, Y. K. Lin and Q. C. Li, EM Jan. 93, p113-127.
- Spatial Seismic Excitations and Response Spectra, Zbigniew Zembaty and Steen Krenk, EM Dec. 93, p2449-2460.

- Toppling of Computer-Type Equipment under Base Excitation, M. F. Dimentberg, Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160.
- Wind-Excited Surge Response of Tension-Leg Platform: Frequency-Domain Approach, Ahsan Kareem and Yousun Li, EM Jan. 93, p161-183.

Random waves

Non-Gaussian Properties of Second-Order Random Waves, Sau-Lon James Hu and Dongsheng Zhao, EM Feb. 93, p344-364.

Reinforcement

- Large-Strain Analysis of Reinforced Membranes, G. Wayne Brodland, Marcus J. Dell and Eric F. P. Burnett, EM Dec. 93, p2461-2477.
- Shear-Lag Analysis of Planar Soil Reinforcement in Plane-Strain Compression, Mauricio Abramento and Andrew J. Whittle, EM Feb. 93, p270-291.

Relaxation, mechanics

Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.

Reliability analysis

- Multimodal Simulation Method for System Reliability Analysis, Gongkang Fu and Fred Moses, EM June 93, p1173-1179.
- Outcrossing of Stationary Gaussian Process from 2D Elliptical Region, Øistein Hagen, EM May 93, p973-996.
- Selection of Random Field Mesh in Finite Element Reliability Analysis, Pei-Ling Liu and Kuo-Gin Liu, EM Apr. 93, p667-680.

Resonance

Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, P. Yu, Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-2425.

Response spectra

- Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.
- Spatial Seismic Excitations and Response Spectra, Zbigniew Zembaty and Steen Krenk, EM Dec. 93, p2449-2460.

Reynolds stress

Analysis of Mixing Layer by Rate-Dependent Turbulence Model, Showkat J. Chowdhury and Goodarz Ahmadi, EM Aug. 93, p1700-1706.

Rigid-body dynamics

- Base Excitation of Rigid Bodies. I: Formulation, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2286-2306.
- Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.
- Free Rocking of Prismatic Blocks, P. R. Lipscombe and S. Pellegrino, EM July 93, p1387-1410.

Rigidity

- Analysis of Large Deflection Dynamic Response of Rigid-Plastic Beams, Faliang Chen and Tongxi Yu, EM June 93, p1293-1301.
- Frictionless Contact with BEM Using Quadratic Programming, Srdan Simunović and Sunil Saigal, EM Sept. 92, p1876-1891.

Rotation

- Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salvatore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.
- Eulerian Formulation for Large-Displacement Analysis of Space Frames, B. A. Izzuddin and A. S. Elnashai, EM Mar. 93, p549-569.
- Free Rocking of Prismatic Blocks, P. R. Lipscombe and S. Pellegrino, EM July 93, p1387-1410.

Sampling

Multimodal Simulation Method for System Reliability Analysis, Gongkang Fu and Fred Moses, EM June 93, p1173-1179.

Sand

- Stability of Granular Materials in Postpeak Softening Regime, Poul V. Lade and Jerry A. Yamamuro, EM Jan. 93, p128-144.
- Triaxial Test Instability of a Nonassociated Flow-Rule Model, Daniel C. Drucker and Ming Li, EM June 93, p1188-1204.

Sandwich structures

- High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, Y. Frostig, EM May 93, p955-972.
- High-Order Buckling Analysis of Sandwich Beams with Transversely Flexible Core, Y. Frostig and M. Baruch, EM Mar. 93, p476-495.
- Stability of Prebuckled Sandwich Elastica Arches: Parametric Study, Amir Mirmiran and Amde M. Wolde-Tinsae, EM Apr. 93, p767-785.

Scale effec

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Scattering

- Discrete Wave-Number Boundary-Element Method for 3-D Scattering Problems, Jaekwan Kim and Apostolos S. Papageorgiou, EM Mar. 93, p603-624.
- Transient Scattering from Submerged Cylindrical Shell with Appendages, Salvatore J. Messana and Frank L. DiMaggio, EM July 93, p1434-1452.

Sediment

Dynamic Pressure of Water and Sediment on Rigid Dam, Bang-Fuh Chen and Tin-Kan Hung, EM July 93, p1411-1433.

Seepage

Dynamic Stiffness of Foundations on Fluid-Filled Poroelastic Stratum, Samir Bougacha, José M. Roësset and John L. Tassoulas, EM Aug. 93, p1649-1662.

Seismic analysis

Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.

Seismic design

Simulation of Spatially Incoherent Random Ground Motions, O. Ramadan and M. Novak, EM May 93, p997-1016.

Seismic effects

- Nonlinear Free-Surface Flow in Oscillating Channel during Earthquakes, Yusuke Tahara and Allen T. Chwang, EM Apr. 93, p801-812.
- Response of Earth Dams in Semicylindrical Canyons to Oblique SH Waves, Panos Dakoulas, EM Jan. 93, p74-90.

Seismic response

- Application of Hybrid Sliding Isolation System to Buildings, Maria Qing Feng, EM Oct. 93, p2090-2108.
- Base Excitation of Rigid Bodies. I: Formulation, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2286-2306.
- Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.
- Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.
- Discrete Wave-Number Boundary-Element Method for 3-D Scattering Problems, Jackwan Kim and Apostolos S. Papageorgiou, EM Mar. 93, p603-624.
- Improved Time-History Analysis for Structural Dynamics. I: Treatment of Rapid Variation of Excitation and Material Nonlinearity, C. -C. Chen and A. R. Robinson, EM Dec. 93, p2496-2513.
- Improved Time-History Analysis for Structural Dynamics II: Reduction of Effective Number of Degrees of Freedom, A. R. Robinson and C. -C. Chen, EM Dec. 93, p2514-2530.
- Seismic Coupled Modeling of Axisymmetric Tanks Containing Liquid, Khai Seong Lay, EM Sept. 93, p1747-1761.
- Simulation of Spatially Incoherent Random Ground Motions, O. Ramadan and M. Novak, EM May 93, p997-1016.
- Spatial Seismic Excitations and Response Spectra, Zbigniew Zembaty and Steen Krenk, EM Dec. 93, p2449-2460.
- Toppling of Computer-Type Equipment under Base Excitation, M. F. Dimentberg, Y. K. Lin and Ruichong Zhang, EM Jan. 93, p145-160.

Seismic waves

- Earthquake Analysis of Arch Dams. I: Dam-Foundation Interaction, Orlando Maeso and José Domínguez, EM Mar. 93, p496-512.
- Earthquake Analysis of Arch Dams. II: Dam-Water-Foundation Interaction, José Domínguez and Orlando Maeso, EM Mar. 93, p513-530.

Sensitivity analysis

Direct Continuum Approach to Three-Dimensional Sensitivity Analysis, Zhiye Zhao, EM Nov. 93, p2143-2156.

Sensitivity Analysis of Thin-Walled I-Beams Resting on Elastic Foundation, B. B. Budkowska and C. Szymczak, EM June 92, p1239-1248.

Kinematics of Crack Formation in Cementitious Composites by Fiber Optics, Farhad Ansari and Rajendra K. Navalurkar, EM May 93, p1048-1061.

Shake table tests

Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.

Friction-Controllable Sliding Isolation System, Maria Qing Feng, Masanobu Shinozuka and Shunji Fujii, EM Sept. 93, p1845-1864.

Shape

Direct Continuum Approach Three-Dimensional Sensitivity Analysis, Zhiye Zhao, EM Nov. 93, p2143-2156.

Shear deformation

Effect of Shear on Simple Buckling Problem, D. S. Djukic and T. M. Atanackovic, EM May 93, p1108-1115.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Shear forces

Elastoplastic Deflections for Prismatic and Nonprismatic Beams, Filippo Romano, Salva-tore Ganduscio and Gaetano Zingone, EM June 93, p1117-1135.

Shear lag

Shear-Lag Analysis of Planar Soil Reinforcement in Plane-Strain Compression, Mauricio Abramento and Andrew J. Whittle, EM Feb. 93, p270-291.

Shear stress

Effect of Shear on Simple Buckling Problem, D. S. Djukic and T. M. Atanackovic, EM May 93, p1108-1115.

Shell structures

Effect of Rib Eccentricity on Infinitely Long Cy-lindrical Shells, Siddik Şener, EM July 93, p1493-1503.

On Loads Equivalent to Geometrical Imperfections in Shells, Luis A. Godoy, EM Jan. 93, p186-190.

Stability of Cooling Tower Shell with Modified Wind Pressure Coefficients, P. Srinivasa Rao and K. Ramanjaneyulu, EM Nov. 93, p2207-

Shell Finite Element Formulated on Shell Middle Surface, K. S. Lay, EM Oct. 93, p1973-1992.

Shrinkage

Time-Dependent Shortening of Slender RC Col-umns, Zhi Gao and Mark Andrew Bradford, EM Oct. 93, p2036-2051.

Simulation

Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.

Multimodal Simulation Method for System Reli-ability Analysis, Gongkang Fu and Fred Moses, EM June 93, p1173-1179.

Simulation of Concrete-Frame Collapse Due to Dynamic Loading, Motohiko Hakuno and Kimiro Meguro, EM Sept. 93, p1709-1723.

Simulation of Nonstationary Gaussian Processes by Random Trigonometric Polynomials, Mircea Grigoriu, EM Feb. 93, p328-343.

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Ki-tipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Sliding

Application of Hybrid Sliding Isolation System to Buildings, Maria Qing Feng, EM Oct. 93, p2090-2108.

Control of Sliding-Isolated Bridge with Absolute Acceleration Feedback, Satish Nagarajaiah, Michael A. Riley and Andrei Reinhorn, EM Nov. 93, p2317-2332.

Fracture and Slip of Interfaces in Cementitious Composites. I: Characteristics, T. Stankowski, K. Runesson and S. Sture, EM Feb. 93, p292-

Fracture and Slip of Interfaces in Cementitious Composites. II: Implementation, T. Stan-kowski, K. Runesson and S. Sture, EM Feb. 93, p315-327.

Slipping

Nonlinear Analysis of Beams Prestressed by Un-bonded Cables, Andrea Dall'Asta and Luigino Dezi, EM Apr. 93, p720-732.

Sloshing

Dynamic Response of Tank Containing Two Liq-uids, Yu Tang, EM Mar. 93, p531-548.

Softening

Stability of Granular Materials in Postpeak Softening Regime, Poul V. Lade and Jerry A. Yamamuro, EM Jan. 93, p128-144.

Soil-pile interaction

Rational Mechanics of Axial Soil-Pile Interac-tion, Ronald Y. S. Pak and Feng Ji, EM Apr. 93, p813-832.

Soil-pipe interaction

Limit Loads of Buried Pipelines in Inelastic Soil Medium, Yaw-Jeng Chiou and Shue-Yeong Chi, EM May 93, p938-954.

C-11.

Limit Loads of Buried Pipelines in Inelastic Soil Medium, Yaw-Jeng Chiou and Shue-Yeong Chi, EM May 93, p938-954.

Shear-Lag Analysis of Planar Soil Reinforcement in Plane-Strain Compression, Mauricio Abramento and Andrew J. Whittle, EM Feb. 93, p270-291.

Stability of Granular Materials in Postpeak Softening Regime, Poul V. Lade and Jerry A. Yamamuro, EM Jan. 93, p128-144.

Soil-structure interaction

Green's Functions for Transversely Isotropic Elastic Half Space, R. K. N. D. Rajapakse and Y. Wang, EM Sept. 93, p1724-1746.

Solidification

Viscoelasticity with Aging Caused by Solidification of Nonaging Constituent, Ignacio Carol and Zdeněk P. Bažant, EM Nov. 93, p2252-2269.

Space frames

Eulerian Formulation for Large-Displacement Analysis of Space Frames, B. A. Izzuddin and A. S. Elnashai, EM Mar. 93, p549-569.

Spatial data

Conditional Simulation of Spatially Correlated Earthquake Ground Motion, Erik H. Vanmarcke, Ernesto Heredia-Zavoni and Gordon A. Fenton, EM Nov. 93, p2333-2352.

Spatial Seismic Excitations and Response Spectra, Zbigniew Zembaty and Steen Krenk, EM Dec. 93, p2449-2460.

Specific energy

Damage-Evolution Approach to Fatigue Cracking in Pavements, H. A. Aglan and J. L. Figueroa, EM June 93, p1243-1259.

Spectral density function

Multivariate Hermite Expansion of Hydrodynamic Drag Loads on Tension Leg Platforms, Yousun Li and A. Kareem, EM Jan. 93, p91-112.

Stability

Lower Bounds for Critical Buckling Load Using Matrix Norms, Robert Piché, EM May 93, p1100-1107.

New Approach to Buckling of Imperfection-Sensitive Structures, G. V. Palassopoulos, EM Apr. 93, p850-869.

New Stochastic Theory for Bridge Stability in Turbulent Flow, Y. K. Lin and Q. C. Li, EM Jan. 93, p113-127.

Plate-Stiffener Assemblies in Uniform Compression. Part I: Buckling, Osama K. Bedair and Archibald N. Sherbourne, EM Oct. 93, p1937-1955

Plate-Stiffener Assemblies in Uniform Compression. Part II: Postbuckling, Archibald N. Sherbourne and Osama K. Bedair, EM Oct. 93, p1956-1972.

Propagating Instabilities in Long Shallow Panels, S. Kyriakides and R. Arseculeratne, EM Mar. 93, p570-583.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Stability of Cooling Tower Shell with Modified Wind Pressure Coefficients, P. Srinivasa Rao and K. Ramanjaneyulu, EM Nov. 93, p2207-2225.

Stability of Granular Materials in Postpeak Softening Regime, Poul V. Lade and Jerry A. Yamamuro, EM Jan. 93, p128-144.

Stability of Prebuckled Sandwich Elastica Arches: Parametric Study, Amir Mirmiran and Amde M. Wolde-Tinsae, EM Apr. 93, p767-785.

Theoretical Study of Stability Criteria for X-Bracing Systems, Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364.

Triaxial Test Instability of a Nonassociated Flow-Rule Model, Daniel C. Drucker and Ming Li, EM June 93, p1188-1204.

Stability analysis

Flexural-Torsional Stability of Thin-Walled Columns, Juha Paavola and Seppo Salonen, EM Dec. 92, p2384-2400.

Lumped-Parameter Approach to Stability Analysis, Sudhir J. Shah and Walter D. Pilkey, EM Oct. 93, p2109-2129.

Stationary processes

Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes, C. Q. Li and R. E. Melchers, EM Nov. 93, p2354-2361.

Simulation of Nonstationary Gaussian Processes by Random Trigonometric Polynomials, Mircea Grigoriu, EM Feb. 93, p328-343.

Steady state

Base Excitation of Rigid Bodies. II: Periodic Slide-Rock Response, Harry W. Shenton, III. and Nicholas P. Jones, EM Oct. 91, p2307-2328.

Steel

Method to Solve Bond Differential-Equation System in Prestressed Concrete, Gert König and Nguyen Tue, EM Nov. 93, p2194-2206.

Sectional Capacity of Circular Steel Tubes under Combined Loading, Kye Han, S. T. Mau and X. Zou, EM Feb. 93, p402-409.

Steel structures

Fatigue of Welded Cruciforms Subjected to Narrow-Band Loadings, S. Sarkani, D. P. Kihl and J. E. Beach, EM Feb. 92, p296-311.

Stiffeners

Plate-Stiffener Assemblies in Uniform Compression. Part I: Buckling, Osama K. Bedair and Archibald N. Sherbourne, EM Oct. 93, p1937-1955

Plate-Stiffener Assemblies in Uniform Compression. Part II: Postbuckling, Archibald N. Sherbourne and Osama K. Bedair, EM Oct. 93, p1956-1972.

Simplified Buckling Analysis of Plate with Compound Edge Stiffeners, L. K. Seah and J. Rhodes, EM Jan. 93, p19-38.

Stability of Cooling Tower Shell with Modified Wind Pressure Coefficients, P. Srinivasa Rao and K. Ramanjaneyulu, EM Nov. 93, p2207-2225.

Stiffness

Dynamic Stability and Chaos of System with Piecewise Linear Stiffness, C. Y. Liaw and C. G. Koh, EM Aug. 93, p1542-1557.

Lateral Buckling of Nonprismatic Cantilevers Using Weighted Residuals, Graham Baker, EM Oct. 93, p1899-1919.

Minimum Lateral Stiffness for Equally Spaced Braces in Columns, Hai-Yan Zhang, Jean-Guy Beliveau and Dryver R. Huston, EM Sept. 93, p1888-1897.

Postbuckling Analysis of Stiffened Laminated Box Columns, Hui-shen Shen and F. W. Williams, EM Jan. 93, p39-57.

Reduction of Dynamic Cable Stiffness to Linear Matrix Polynomial, Uwe Starossek, EM Oct. 93, p2132-2136.

Stiffness matrix

Complete Stiffness Matrices for Buckling Analysis of Frames, Petr Krysl, EM Feb. 93, p225-237.

Lower Bounds for Critical Buckling Load Using Matrix Norms, Robert Piché, EM May 93, p1100-1107.

Lumped-Parameter Approach to Stability Analysis, Sudhir J. Shah and Walter D. Pilkey, EM Oct. 93, p2109-2129.

Stochastic processes

Outcrossing of Stationary Gaussian Process from 2D Elliptical Region, Øistein Hagen, EM May 93, p973-996.

Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes, C. Q. Li and R. E. Melchers, EM Nov. 93, p2354-2361.

Storage tanks

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

Storms

Non-Gaussian Properties of Second-Order Random Waves, Sau-Lon James Hu and Dongsheng Zhao, EM Feb. 93, p344-364.

Strain

Elastic Buckling of Circular Plates Allowing for Prebuckling Deformation, G. M. Hong, C. M. Wang and W. Kanok-Nukulchai, EM May 93, p905-916.

Influence of Boundary Conditions on Strain Softening in Concrete Compression Test, J. M. Torrenti, E. H. Benaija and C. Boulay, EM Dec. 93, p2369-2384.

Large-Strain Analysis of Reinforced Membranes, G. Wayne Brodland, Marcus J. Dell and Eric F. P. Burnett, EM Dec. 93, p2461-2477.

Response of Continuous Pavements to Moving Dynamic Loads, M. S. A. Hardy and D. Cebon, EM Sept. 93, p1762-1780. Use of Engineering Strain and Trefftz Theory in Buckling of Columns, C. M. Wang and W. A. M. Alwis, EM Oct. 92, p2135-2140.

Strain hardening

Strain Hardening Beams Under Shear, Bending, and Axial Forces, F. Lu and A. N. Sherbourne, EM Nov. 93, p2174-2193.

Cenain not

Notch Sensitivity of First-Year Sea Ice, B. L. Parsons, F. M. Williams, J. Everard and T. Slade, EM July 93, p1303-1313.

Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.

Strain softening

Plasticity-Damage Model for Concrete Under Cyclic Multiaxial Loading, Taher M. Abu-Lebdeh and George Z. Voyiadjis, EM July 93, p1465-1484.

Stress

Determination of Inter- and Free-Boundary Stresses in Plate Analysis, Ai-Kah Soh and Chee-Kiong Soh, EM Mar. 93, p427-438.

Effect of Rib Eccentricity on Infinitely Long Cylindrical Shells, Siddik Şener, EM July 93, p1493-1503.

Elastic Field of Internal Circular Crack Subjected to Linear Shear Loading, E. N. Karapetian, EM July 93, p1314-1330.

Green's Functions for Transversely Isotropic Elastic Half Space, R. K. N. D. Rajapakse and Y. Wang, EM Sept. 93, p1724-1746.

Half-Plane Crack Under Normal Load: Complete Solution, V. I. Fabrikant, B. S. Rubin and E. N. Karapetian, EM Nov. 93, p2238-2251.

Higher Order Modeling of Plates by p-Version of Finite Element Method, Nesar U. Ahmed and Prodyot K. Basu, EM June 93, p1228-1242.

Plasticity Model for Transversely Isotropic Materials, Richard J. Schmidt, Dong-Qing Wang and Andrew C. Hansen, EM Apr. 93, p748-766.

Response of Continuous Pavements to Moving Dynamic Loads, M. S. A. Hardy and D. Cebon, EM Sept. 93, p1762-1780.

Use of Engineering Strain and Trefftz Theory in Buckling of Columns, C. M. Wang and W. A. M. Alwis, EM Oct. 92, p2135-2140.

Stress analysis

Analysis of Adhesive-Bonded Cylindrical Lap Joints Subjected to Axial Load, Y. P. Shi and S. Cheng, EM Mar. 93, p584-602.

On Loads Equivalent to Geometrical Imperfections in Shells, Luis A. Godoy, EM Jan. 93, p186-190.

Stress Analysis of Borehole in Poroelastic Medium, R. K. N. D. Rajapakse, EM June 93, p1205-1227.

Stress concentration

High-Order Behavior of Sandwich Beams with Flexible Core and Transverse Diaphragms, Y. Frostig, EM May 93, p955-972.

Stress distribution

Determination of Inter- and Free-Boundary Stresses in Plate Analysis, Ai-Kah Soh and Chee-Kiong Soh, EM Mar. 93, p427-438.

Stress intensity factor

Second Mixed-Boundary-Value Problem for Thin-Plate Bending, Norio Hasebe, Masahiro Miwa and Takuji Nakamura, EM Feb. 93, p211-224.

Stress relaxation

Time-Dependent Response of Three-Filament Cord, Ted A. Conway and George A. Costello, EM Apr. 93, p833-849.

Stress strain relations, soils

Stresses in Ground-Freezing Problems with Infi-nite Boundaries, Hasan G. Askar, EM Jan. 93, p58-73.

Structural analysis

Boundary Element-Transfer Matrix Method for Plated Structures, Mitao Ohga, Tsunemi Shi-gematsu and Takashi Hara, EM Nov. 91,

Crack-Induced Changes in Eigenparameters of Beam Structures, Antonino Morassi, EM Sept. 93, p1798-1803.

Finite Step Updating Method for Elasto-Plastic Analysis of Frames, S. Krenk, S. Vissing and C. Vissing-Jørgensen, EM Dec. 93, p2478-2495.

Lower Bounds for Critical Buckling Load Using Matrix Norms, Robert Piché, EM May 93, p1100-1107

New Approach to Buckling of Imperfection-Sensitive Structures, G. V. Palassopoulos, EM Apr. 93, p850-869.

Viscoelastic Heterogeneous Structures with Variable Structural System, Luigino Dezi, Giovanni Menditto and Angelo Marcello Tarantino, EM Feb. 93, p238-250.

Structural behavior

Simplified Method for Dynamic Response of Tapered Structure, Chongbin Zhao and S. Valliappan, EM July 93, p1486-1492.

Structural dynamics

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Improved Time-History Analysis for Structural Dynamics. I: Treatment of Rapid Variation of Excitation and Material Nonlinearity, C. -C. Chen and A. R. Robinson, EM Dec. 93, p2496-2513.

Improved Time-History Analysis for Structural Dynamics II: Reduction of Effective Number of Degrees of Freedom, A. R. Robinson and C.-C. Chen, EM Dec. 93, p2514-2530.

Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, Fayaz R. Rofooei and Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010.

Optimal Direct Output Feedback of Structural Control, L. L. Chung, C. C. Lin and S. Y. Chu, EM Nov. 93, p2157-2173.

Problematics in Formulation of Wind-Force Models for Bridge Decks, Robert H. Scanlan, EM July 93, p1353-1375.

Structural elements

Experimental Studies of Loading Rate Effects on Reinforced Concrete Columns, E. Gutierrez, G. Magonette and G. Verzeletti, EM May 93, p887-904.

Structural failures

Effect of Member Snap on Space Truss Collapse, Nicholas F. Morris, EM Apr. 93, p870-886.

Lumped-Parameter Approach to Stability Analy sis, Sudhir J. Shah and Walter D. Pilkey, EM Oct. 93, p2109-2129.

Structural reliability

Outcrossing of Stationary Gaussian Process from 2D Elliptical Region, Øistein Hagen, EM May 93, p973-996.

Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes, C. Q. Li and R. E. Melchers, EM Nov. 93, p2354-2361.

Selection of Random Field Mesh in Finite Element Reliability Analysis, Pei-Ling Liu and Kuo-Gin Liu, EM Apr. 93, p667-680.

Structural stability

Lumped-Parameter Approach to Stability Analysis, Sudhir J. Shah and Walter D. Pilkey, EM Oct. 93, p2109-2129.

Minimum Lateral Stiffness for Equally Spaced Braces in Columns, Hai-Yan Zhang, Jean-Guy Beliveau and Dryver R. Huston, EM Sept. 93, p1888-1897.

Postbuckling Analysis of Stiffened Laminated Box Columns, Hui-shen Shen and F. W. Williams, EM Jan. 93, p39-57.

Structures

Simple Friction Model for Scissor-Type Mobile Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, EM Mar. 93, p456-

Simplified Method for Dynamic Response of Tapered Structure, Chongbin Zhao and S. Valliappan, EM July 93, p1486-1492.

Analysis of Wave Scattering by Submerged Cir-cular Disk, Xiping Yu and Allen T. Chwang, EM Sept. 93, p1804-1817.

Second-Order Radiation Condition for Surface Wave-Body Interaction, P. F. Wang and P. D. Sclavounos, EM June 93, p1155-1172.

System reliability

Multimodal Simulation Method for System Reli-ability Analysis, Gongkang Fu and Fred Moses, EM June 93, p1173-1179.

Systems

Dynamic Stability and Chaos of System with Piecewise Linear Stiffness, C. Y. Liaw and C. G. Koh, EM Aug. 93, p1542-1557.

Viscoelastic Heterogeneous Structures with Variable Structural System, Luigino Dezi, Giovanni Menditto and Angelo Marcello Tarantino, EM Feb. 93, p238-250.

Tall buildings

Wind-Tunnel Techniques for Assessment of Pedestrian-Level Winds, Hanqing Wu and Theodore Stathopoulos, EM Oct. 93, p1920-1936.

Seismic Coupled Modeling of Axisymmetric Tanks Containing Liquid, Khai Seong Lay, EM Sept. 93, p1747-1761.

Simplified Method for Dynamic Response of Tapered Structure, Chongbin Zhao and S. Val-liappan, EM July 93, p1486-1492.

Temperature distribution

Stresses in Ground-Freezing Problems with Infinite Boundaries, Hasan G. Askar, EM Jan. 93, p58-73.

Temperature effects

Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.

Damage Model for Concrete Using Bounding Surface Concept, George Z. Voyiadjis and Taher M. Abu-Lebdeh, EM Sept. 93, p1865-

Theoretical Study of Stability Criteria for X-Bracing Systems, Dong Q. Wang and Arthur P. Boresi, EM July 92, p1357-1364.

Tension leg platforms

Multivariate Hermite Expansion of Hydrodynamic Drag Loads on Tension Leg Platforms, Yousun Li and A. Kareem, EM Jan. 93, p91-

Wind-Excited Surge Response of Tension-Leg Platform: Frequency-Domain Approach, Ah-san Kareem and Yousun Li, EM Jan. 93, p161-183.

Testing

Notch Sensitivity of First-Year Sea Ice, B. L. Parsons, F. M. Williams, J. Everard and T. Slade, EM July 93, p1303-1313.

The Bicycle Wheel as Prestressed Structure, C. J. Burgoyne and R. Dilmaghanian, EM Mar. 93, p439-455.

Simplified Buckling Analysis of Plate with Compound Edge Stiffeners, L. K. Seah and J. Rhodes, EM Jan. 93, p19-38.

Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.

Shell Finite Element Formulated on Shell Middle Surface, K. S. Lay, EM Oct. 93, p1973-1992.

Thermal Postbuckling of Uniform Columns on Elastic Foundation, K. Kanaka Raju and G. Venkateswara Rao, EM Mar. 93, p626-629.

Uniaxial Model for Concrete Under Variable Temperature and Stress, A. Khennane and G. Baker, EM Aug. 93, p1507-1525.

Thermal stresses

Stresses in Ground-Freezing Problems with Infinite Boundaries, Hasan G. Askar, EM Jan. 93, p58-73.

Boundary-Continuous Fourier Solution for Clamped Mindlin Plates, Humayun R. H. Ka bir and Reaz A. Chaudhuri, EM July 92, p1457-1467.

Fundamental Frequency of Tapered Plates by Differential Quadrature, Anant R. Kukreti, Jalaleddin Farsa and Charles W. Bert, EM June 92, p1221-1238.

Higher Order Modeling of Plates by p-Version of Finite Element Method, Nesar U. Ahmed and Prodyot K. Basu, EM June 93, p1228-1242.

Mindlin Plate Buckling with Prebuckling In-Plane Deformation, Y. Xiang, C. M. Wang, K. M. Liew and S. Kitipornchai, EM Jan. 93, p1-18

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Thin shell structures

Flexible Thin Shell Elements Under Nonwhite and Nonzero Mean Loads, Charles C. T. Chen and Henry T. Y. Yang, EM Aug. 93, p1680-

On Loads Equivalent to Geometrical Imperfections in Shells, Luis A. Godoy, EM Jan. 93,

Shell Finite Element Formulated on Shell Middle Surface, K. S. Lav. EM Oct. 93, p1973-1992.

Thin wall sections

Flexural-Torsional Stability of Thin-Walled Col-umns, Juha Paavola and Seppo Salonen, EM Dec. 92, p2384-2400.

Hybrid Analytical Technique for Nonlinear Vibration Analysis of Thin-Walled Beams, Ahmed K. Noor, M. Jafar Hadian and Carl M. Andersen, EM Apr. 93, p786-800.

Sensitivity Analysis of Thin-Walled I-Beams Resting on Elastic Foundation, B. B. Budkows-ka and C. Szymczak, EM June 92, p1239-1248.

Simplified Buckling Analysis of Plate with Compound Edge Stiffeners, L. K. Seah and J. Rhodes, EM Jan. 93, p19-38.

Time dependence

Dynamic Compaction of Saturated Porous Columns, M. Yavuz Corapcioglu, Shashi Mathur and Jacob Bear, EM Aug. 93, p1558-1578.

Far-Field Modeling in 3D Dam-Reservoir Inter-action Analysis, Rihul Yang, C. S. Tsai and G. C. Lee, EM Aug. 93, p1615-1631.

Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes, C. Q. Li and R. E. Melchers, EM Nov. 93, p2354-2361.

Time-Dependent Response of Three-Filament Cord, Ted A. Conway and George A. Costello, EM Apr. 93, p833-849.

Time-Dependent Shortening of Slender RC Col-umns, Zhi Gao and Mark Andrew Bradford, EM Oct. 93, p2036-2051.

Viscoelastic Heterogeneous Structures with Variable Structural System, Luigino Dezi, Giovanni Menditto and Angelo Marcello Tarantino, EM Feb. 93, p238-250.

Time factors

- Improved Time-History Analysis for Structural Dynamics. I: Treatment of Rapid Variation of Excitation and Material Nonlinearity, C. -C. Chen and A. R. Robinson, EM Dec. 93, p2496-2513.
- Improved Time-History Analysis for Structural Dynamics II: Reduction of Effective Number of Degrees of Freedom, A. R. Robinson and C. -C. Chen, EM Dec. 93, p2514-2530.
- Posterior Time-Step Adjustment in Pseudodynamic Testing, Waon-Ho Yi and Ralf Peek, EM July 93, p1376-1386.
- Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Time series analysis

Simulation of Multivariate Random Processes: Hybrid DFT and Digital Filtering Approach, Yousun Li and Ahsan Kareem, EM May 93, p1078-1098.

Tire

The Bicycle Wheel as Prestressed Structure, C. J. Burgoyne and R. Dilmaghanian, EM Mar. 93, p439-455.

Topography

Discrete Wave-Number Boundary-Element Method for 3-D Scattering Problems, Jaekwan Kim and Apostolos S. Papageorgiou, EM Mar. 93, p603-624.

Torsion

- Flexural-Torsional Stability of Thin-Walled Columns, Juha Paavola and Seppo Salonen, EM Dec. 92, p2384-2400.
- Sensitivity Analysis of Thin-Walled I-Beams Resting on Elastic Foundation, B. B. Budkowska and C. Szymczak, EM June 92, p1239-1248.

Transducers

Development of Interferometer for Acoustic Emission Testing, Douglas A. Bruttomesso, Laurence J. Jacobs and R. Daniel Costley, EM Nov. 93, p2303-2316.

Transient flow

Second-Order Radiation Condition for Surface Wave-Body Interaction, P. F. Wang and P. D. Sclavounos, EM June 93, p1155-1172.

Transient response

- Transient Lamb's Solution for Surface Strip Impulses, Hirokazu Takemiya and Fei Guan, EM Dec. 93, p2385-2403.
- Transient Scattering from Submerged Cylindrical Shell with Appendages, Salvatore J. Messana and Frank L. DiMaggio, EM July 93, p1434-1452.

Transmission lines

Coupled Vertical and Horizontal Galloping, Kathleen F. Jones, EM Jan. 92, p92-107.

- Three-Degree-of-Freedom Model for Galloping. Part II: Solutions, P. Yu, Y. M. Desai, N. Popplewell and A. H. Shah, EM Dec. 93, p2426-2448.
- Three-Degree-of-Freedom Model for Galloping. Part I: Formulation, P. Yu, Y. M. Desai, A. H. Shah and N. Popplewell, EM Dec. 93, p2404-2425.

Triaxial tests

- Stability of Granular Materials in Postpeak Softening Regime, Poul V. Lade and Jerry A. Yamamuro, EM Jan. 93, p128-144.
- Triaxial Test Instability of a Nonassociated Flow-Rule Model, Daniel C. Drucker and Ming Li, EM June 93, p1188-1204.

russes

Effect of Member Snap on Space Truss Collapse, Nicholas F. Morris, EM Apr. 93, p870-886.

Tube

Sectional Capacity of Circular Steel Tubes under Combined Loading, Kye Han, S. T. Mau and X. Zou, EM Feb. 93, p402-409.

Turbulence

- Analysis of Mixing Layer by Rate-Dependent Turbulence Model, Showkat J. Chowdhury and Goodarz Ahmadi, EM Aug. 93, p1700-1706.
- New Stochastic Theory for Bridge Stability in Turbulent Flow, Y. K. Lin and Q. C. Li, EM Jan. 93, p113-127.

Turbulent flow

- Analysis of Mixing Layer by Rate-Dependent Turbulence Model, Showkat J. Chowdhury and Goodarz Ahmadi, EM Aug. 93, p1700-1706.
- Computation of Wind Pressures on L-Shaped Buildings, Theodore Stathopoulos and Yongsheng Zhou, EM Aug. 93, p1526-1541.
- Flow through Porous Bed of Turbulent Stream, Donghuo Zhou and Cesar Mendoza, EM Feb. 93, p365-383.

Two-dimensional models

- Dynamic Pressure of Water and Sediment on Rigid Dam, Bang-Fuh Chen and Tin-Kan Hung, EM July 93, p1411-1433.
- Higher Order Modeling of Plates by p-Version of Finite Element Method, Nesar U. Ahmed and Prodyot K. Basu, EM June 93, p1228-1242.

Iltimate load

Effect of Member Snap on Space Truss Collapse, Nicholas F. Morris, EM Apr. 93, p870-886.

Underwater structures

- Analysis of Wave Scattering by Submerged Circular Disk, Xiping Yu and Allen T. Chwang, EM Sept. 93, p1804-1817.
- Transient Scattering from Submerged Cylindrical Shell with Appendages, Salvatore J. Messana and Frank L. DiMaggio, EM July 93, p1434-1452.

Uniformity

Thermal Postbuckling of Uniform Columns on Elastic Foundation, K. Kanaka Raju and G. Venkateswara Rao, EM Mar. 93, p626-629.

3

Validation

Moving Load Response of Layered Soil. II: Verification and Application, Raj Siddharthan, Zia Zafir and Gary M. Norris, EM Oct. 93, p2072-2089.

Variability

Fundamental Frequency of Tapered Plates by Differential Quadrature, Anant R. Kukreti, Jalaleddin Farsa and Charles W. Bert, EM June 92, p1221-1238.

Viscoelastic Heterogeneous Structures with Variable Structural System, Luigino Dezi, Giovanni Menditto and Angelo Marcello Tarantino, EM Feb. 93, p238-250.

Velocity

Optimal Control of Structures with Acceleration, Velocity and Displacement Feedback, Fayaz R. Rofooei and Iradj G., Tadjbakhsh, EM Oct. 93, p1993-2010.

Vibration

Associate Linear System Approach to Nonlinear Random Vibration, Binod K. Bhartia and Erik H. Vanmarcke, EM Oct. 91, p2407-2428.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.

Hybrid Analytical Technique for Nonlinear Vibration Analysis of Thin-Walled Beams, Ahmed K. Noor, M. Jafar Hadian and Carl M. Andersen, EM Apr. 93, p786-800.

Improved Time-History Analysis for Structural Dynamics. I: Treatment of Rapid Variation of Excitation and Material Nonlinearity, C. -C. Chen and A. R. Robinson, EM Dec. 93, p2496-2513.

Improved Time-History Analysis for Structural Dynamics II: Reduction of Effective Number of Degrees of Freedom, A. R. Robinson and C. -C. Chen, EM Dec. 93, p2514-2530.

Parametrically Induced Vibration in Concrete Columns, Nader Ghafoori and Kambiz Farhang, EM June 93, p1180-1187.

Response of Earth Dams in Semicylindrical Canyons to Oblique SH Waves, Panos Dakoulas, EM Jan. 93, p74-90.

Transverse Vibration of Thick Annular Sector Plates, Y. Xiang, K. M. Liew and S. Kitipornchai, EM Aug. 93, p1579-1599.

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287.

Vortex-Induced Vibration of Circular Cylinders. II: New Model, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2288-2302.

Viscoelasticity

Dynamic Analysis of Generalized Viscoelastic Fluids, Nicos Makris, G. F. Dargush and M. C. Constantinou, EM Aug. 93, p1663-1679.

Models of Viscoelasticity with Complex-Order Derivatives, Nicos Makris and M. C. Constantinou, EM July 93, p1453-1464.

Time-Dependent Response of Three-Filament Cord, Ted A. Conway and George A. Costello, EM Apr. 93, p833-849. Viscoelastic Heterogeneous Structures with Variable Structural System, Luigino Dezi, Giovanni Menditto and Angelo Marcello Tarantino, EM Feb. 93, p238-250.

Viscoelasticity with Aging Caused by Solidification of Nonaging Constituent, Ignacio Carol and Zdeněk P. Bažant, EM Nov. 93, p2252-2269.

Viscosity

Dynamic Analysis of Generalized Viscoelastic Fluids, Nicos Makris, G. F. Dargush and M. C. Constantinou, EM Aug. 93, p1663-1679.

Viscous flow

Finite Analytic Model for Left Ventricular Systolic Flow Dynamics, Richard T. Schoephoerster, Cesar L. Silva and Gautam Ray, EM Apr. 93, p733-747.

Volume change

Determination of Load Sharing in Insulating Glass Units, Johann-Dietrich Wörner, Xiaofeng Shen and Bernhard Sagmeister, EM Feb. 93, p386-392.

Vortex shedding

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287.

Vortex-Induced Vibration of Circular Cylinders. II: New Model, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2288-2302.

Vortices

Vortex-Induced Vibration of Circular Cylinders. I: Experimental Data, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2270-2287.

Vortex-Induced Vibration of Circular Cylinders. II: New Model, Indranil Goswami, Robert H. Scanlan and Nicholas P. Jones, EM Nov. 93, p2288-2302.

Water waves

Analysis of Wave Scattering by Submerged Circular Disk, Xiping Yu and Allen T. Chwang, EM Sept. 93, p1804-1817.

Water Waves on Flexible and Porous Breakwaters, Keh-Han Wang and Xugui Ren, EM May 93, p1025-1047.

Wave diffraction

Analysis of Wave Scattering by Submerged Circular Disk, Xiping Yu and Allen T. Chwang, EM Sept. 93, p1804-1817.

Wave forces

Water Waves on Flexible and Porous Breakwaters, Keh-Han Wang and Xugui Ren, EM May 93, p1025-1047.

Wave generation

Study on Porous Wave Makers, L. H. Huang, P. C. Hsieh and G. Z. Chang, EM Aug. 93, p1600-1614.

Wave spectra

Non-Gaussian Properties of Second-Order Random Waves, Sau-Lon James Hu and Dongsheng Zhao, EM Feb. 93, p344-364.

Waves

- Discrete Wave-Number Boundary-Element Method for 3-D Scattering Problems, Jaekwan Kim and Apostolos S. Papageorgiou, EM Mar. 93, p603-624.
- Response of Earth Dams in Semicylindrical Canyons to Oblique SH Waves, Panos Dakoulas, EM Jan. 93, p74-90.
- Wind-Excited Surge Response of Tension-Leg Platform: Frequency-Domain Approach, Ahsan Kareem and Yousun Li, EM Jan. 93, p161-183.

Weighting functions

Lateral Buckling of Nonprismatic Cantilevers Using Weighted Residuals, Graham Baker, EM Oct. 93, p1899-1919.

Welde

Fatigue of Welded Cruciforms Subjected to Narrow-Band Loadings, S. Sarkani, D. P. Kihl and J. E. Beach, EM Feb. 92, p296-311.

Wheels

The Bicycle Wheel as Prestressed Structure, C. J. Burgoyne and R. Dilmaghanian, EM Mar. 93, p439-455.

White noise

Simulation of Multivariate Random Processes: Hybrid DFT and Digital Filtering Approach, Yousun Li and Ahsan Kareem, EM May 93, p1078-1098.

Wind

- Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.
- Wind-Excited Surge Response of Tension-Leg Platform: Frequency-Domain Approach, Ahsan Kareem and Yousun Li, EM Jan. 93, p161-183.

Wind forces

- Computation of Wind Pressures on L-Shaped Buildings, Theodore Stathopoulos and Yongsheng Zhou, EM Aug. 93, p1526-1541.
- Coupled Vertical and Horizontal Galloping, Kathleen F. Jones, EM Jan. 92, p92-107.
- Problematics in Formulation of Wind-Force Models for Bridge Decks, Robert H. Scanlan, EM July 93, p1353-1375.
- Wind-Tunnel Techniques for Assessment of Pedestrian-Level Winds, Hanqing Wu and Theodore Stathopoulos, EM Oct. 93, p1920-1936.

Wind pressure

- Computation of Wind Pressures on L-Shaped Buildings, Theodore Stathopoulos and Yongsheng Zhou, EM Aug. 93, p1526-1541.
- Stability of Cooling Tower Shell with Modified Wind Pressure Coefficients, P. Srinivasa Rao and K. Ramanjaneyulu, EM Nov. 93, p2207-2225.

Wind tunnel test

Wind-Tunnel Techniques for Assessment of Pedestrian-Level Winds, Hanqing Wu and Theodore Stathopoulos, EM Oct. 93, p1920-1936.

Vield

Finite Step Updating Method for Elasto-Plastic Analysis of Frames, S. Krenk, S. Vissing and C. Vissing-Jørgensen, EM Dec. 93, p2478-2495.

Yield surface

Planar Double-Slip Micromechanical Model for Polycrystal Plasticity, Yannis F. Dafalias, EM June 93, p1260-1284.